US EPA RECORDS CENTER REGION 5
459378

Five-Year Review Report

Fourth Five-Year Review Report
for
Summit National Superfund Site

Deerfield Township
Portage County, Ohio

July 2013

Prepared By:
The United States Environmental Protection Agency
Region 5
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Approved by:

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U.S. EPA Region 5

Date:

7/16/2013

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List of Acronyms

ARAR	applicable or relevant and appropriate requirement
bgs	below ground surface
CD	consent decree
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
C-56	hexachlorocyclopentadiene
EC	environmental covenant
ESD	explanation of significant differences
ICs	institutional controls
LIU	Lower Intermediate Unit
MCL	maximum contaminant level
NCP	National Contingency Plan
NPL	National Priorities List
Ohio EPA	Ohio Environmental Protection Agency
O&M	operation and maintenance
OMMP	operation, maintenance and monitoring plan
PCBs	polychlorinated biphenyls
PCE	tetrachloroethene
PRPs	potentially responsible parties
RA	remedial action
RCRA	Resource Conservation and Recovery Act
RD	remedial design
RD/RA	remedial design/remedial action
RI/FS	remedial investigation/feasibility study
ROD	record of decision
RPM	Remedial Project Manager
SNFT	Summit National Facility Trust
SNLD	Summit National Liquid Disposal Service
SSIPL	site-specific indicator parameter list
SVOCs	semivolatile organic chemicals
TAL	target analyte list
TCE	1,1,1–trichloroethane
TCL	target compound list
TCLP	Toxicity Characteristic Leaching Procedure
TSCA	Toxic Substances Control Act
UECA	Uniform Environmental Covenants Act
µg/l	micrograms per liter
UIU	Upper Intermediate Unit
U.S. EPA	U.S. Environmental Protection Agency
UU/UE	unlimited use/unrestricted exposure
VOCs	volatile organic chemicals
WTU	Water Table Unit

Executive Summary

The Summit National site is an 11-acre property in Deerfield, Ohio. The site was a strip mine, coal washing, and coal storage operation prior to 1974. From 1974 to 1978, the facility, then known as the Summit National Liquid Disposal Service facility (SNLD), was used for liquid industrial waste storage, disposal and incineration. SNLD accepted waste oil, sludges, resins, pesticides, plating waste, solvents, polychlorinated biphenyls (PCBs), and other wastes during that period. The Ohio Environmental Protection Agency (Ohio EPA) ordered SNLD to cease operation in June 1978. A surface cleanup, including removal and off-site disposal of 17,000 drums, was completed in June 1982. The U.S. Environmental Protection Agency (U.S. EPA) placed the Summit National site on the National Priorities List (NPL) on September 8, 1983. A remedial investigation and feasibility study (RI/FS) was conducted from February 24, 1984, through June 30, 1988. Potential health risks were found to exist for exposure to contaminants in soil, sediment, surface water and groundwater.

U.S. EPA issued a record of decision (ROD), with the concurrence of Ohio EPA, on June 30, 1988, and later issued an amended ROD on November 2, 1990. The amended ROD required excavation and on-site incineration of contaminated soils, sediments, and the contents of several hundred buried drums, extraction and on-site treatment of contaminated groundwater, treatment of on-site surface water, fencing, and placing a clean soil and vegetative cover over the site. On March 23, 1992, U.S. EPA issued an explanation of significant differences (ESD) with Ohio EPA concurrence. The ESD modified the amended ROD by adding the Toxic Substances Control Act (TSCA) as an applicable or relevant and appropriate requirement (ARAR) for soil incineration, due to the presence of PCBs in excess of 50 parts per million. The ESD allowed for off-site disposal of PCB-contaminated soils exceeding 50 parts per million in the event that the incinerator was unable to meet TSCA standards during the test burn.

The trigger for this Fourth Five-Year Review was the completion date of the Third Five-Year Review for the site. The Third Five-Year Review concluded that the remedy was executed in accordance with the requirements of the ROD, as amended by the ESD, and was protective of human health and the environment.

This Fourth Five-Year Review concludes that the remedy is protective of human health and the environment. Exposure pathways to contaminated groundwater are being controlled and exposure to contaminated soil at the site has been addressed by incinerating the most heavily-contaminated soils, applying a clean soil cover and a vegetative cover, and by fencing that surrounds the site. All required institutional controls (ICs) have been implemented, with an environmental covenant (EC) under the Ohio Uniform Environmental Covenants Act (UECA) recorded on June 5, 2013. Compliance with effective ICs will be ensured through long-term stewardship by maintaining, monitoring, and enforcing effective ICs.

Five-Year Review Summary Form

SITE IDENTIFICATION		
Site Name: Summit National Superfund Site		
EPA ID: OHD980609994		
Region: 5	**State:** OH	**City/County:** Deerfield Township / Portage

SITE STATUS	
NPL Status: Final	
Multiple OUs? No	**Has the site achieved construction completion?** Yes

REVIEW STATUS
Lead agency: EPA
Author name (Federal Project Manager): Pablo N. Valentin
Author affiliation: EPA Region 5
Review period: 10/01/2012 – July 2013
Date of site inspection: 12/11/2012
Type of review: Statutory
Review number: 4
Triggering action date: 08/25/2008
Due date *(five years after triggering action date)*: 08/25/2013

Five-Year Review Summary Form (continued)

Issues/Recommendations
OU(s) without Issues/Recommendations Identified in the Five-Year Review:
N/A

Protectiveness Statement(s)	
Operable Unit: 1	*Protectiveness Determination:* Protective
Protectiveness Statement: This Fourth Five-Year Review concludes that the remedy is protective of human health and the environment. Exposure pathways to contaminated groundwater are being controlled and exposure to contaminated soil at the site has been addressed by incinerating the most heavily-contaminated soils, applying a clean soil cover and a vegetative cover, and by fencing that surrounds the site. All required ICs have been implemented, with an EC under the Ohio UECA recorded on June 5, 2013. Compliance with effective ICs will be ensured through long-term stewardship by maintaining, monitoring, and enforcing effective ICs.	

Sitewide Protectiveness Statement
Protectiveness Determination: Protective
Protectiveness Statement: This Fourth Five-Year Review concludes that the remedy is protective of human health and the environment. Exposure pathways to contaminated groundwater are being controlled and exposure to contaminated soil at the site has been addressed by incinerating the most heavily-contaminated soils, applying a clean soil cover and a vegetative cover, and by fencing that surrounds the site. All required ICs have been implemented, with an EC under the Ohio UECA recorded on June 5, 2013. Compliance with effective ICs will be ensured through long-term stewardship by maintaining, monitoring, and enforcing effective ICs.

Five-Year Review Report

I. Introduction

The purpose of five-year reviews is to determine whether the remedy at a site is protective of human health and the environment. The methods, findings and conclusions of such reviews are documented in site-specific five-year review reports. In addition, five-year review reports identify issues or deficiencies, if any, found during the review process for the site and provide recommendations to address or correct them.

U.S. EPA prepared this five-year review pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) § 121 and the National Contingency Plan (NCP). CERCLA § 121 states:

> *If the President selects a remedial action that results in any hazardous substances, pollutants, or contaminants remaining at the site, the President shall review such remedial action no less often than each five years after the initiation of such remedial action to assure that human health and the environment are being protected by the remedial action being implemented. In addition, if upon such review it is the judgment of the President that action is appropriate at such site in accordance with Section [104] or [106], the President shall take or require such action. The President shall report to the Congress a list of facilities for which such review is required, the results of all such reviews, and any actions taken as a result of such reviews.*

U.S. EPA interpreted this requirement further in the NCP; Chapter 40 Code of Federal Regulations (CFR), § 300.430(f)(4)(ii) states:

> *If a remedial action is selected that results in hazardous substances, pollutants, or contaminants remaining at the site above levels that allow for unlimited use and unrestricted exposure, the lead agency shall review such action no less often than every five years after the initiation of the selected remedial action.*

U.S. EPA has conducted a five-year review of the remedial actions implemented at the Summit National site, also known as the Summit National Liquid Disposal Service facility and as the Deerfield Dump, located in Deerfield, Ohio. The review was conducted from October 2012 to July 2013 by the U.S. EPA Remedial Project Manager (RPM). This report documents the results of the review. As part of this review, the RPM determined that no additional data collection was necessary to evaluate the current site status, since regular monitoring and data reporting is required by the Operation, Maintenance and Monitoring Plan (OMMP) for the site.

This is the Fourth Five-Year Review Report for the Summit National Site. The Third Five-Year Review Report was finalized by U.S. EPA in August 2008. This five-year review is required due to the fact that hazardous substances, pollutants or contaminants

remain at the site above levels that allow for unlimited use and unrestricted exposure (UU/UE).

II. Site Chronology

Table 1: Chronology of Site Events

EVENT	DATE
Site operates as strip mine, coal wash, and coal storage facility	Prior to 1974
State of Ohio issues incinerator permit	1974
Facility accepts waste in drums and tank trucks	1974 to 1978
Ohio notifies facility of Clean Water Act violations	1976
Ohio issues orders to facility to cease receiving waste and to clean up site	1978
Negotiations for surface cleanup of drums, U.S. EPA removes 7,500 gallons of hexachlorocyclopentadiene (C-56)	1979 to 1980
Surface cleanup, removal of 17,000 drums and tank contents under agreement with Ohio EPA and some of the potentially responsible parties (PRPs)	1981 to 1982
Proposed listing to NPL	12/30/1982
Preliminary assessment completed	01/01/1983
Final listing on NPL	09/08/1983
Combined RI/FS	02/24/1984 to 06/30/1988
Unilateral Administrative Order	02/15/1987
Removal Action	03/26/1987 to 05/19/1988
ROD signed	06/30/1988
Remedial design/remedial action negotiations	11/22/1987 to 01/10/1990
Administrative order on consent	08/17/1990
Amended ROD signed	11/02/1990
Effective date of consent decree	06/11/1991
Sediment removal interim response action	10/1991
Pre-design investigations	10/1991 to 12/1991
ESD signed	03/23/1992
Final design approved	06/22/1993
Construction mobilization	07/22/1993
Completed Phase I, II, and III well installation and abandonment	12/30/1993
Completed commissioning of groundwater treatment system	05/16/1994
Commenced treatment and discharge of groundwater from wet well excavation	06/09/1994
Performance demonstration burn for incinerator	09/08/1994 to 09/09/1994

EVENT	DATE
Completed pipe and media drain installation	09/09/1994
Commenced on-site incineration of site soils	09/28/1994
Commenced groundwater hydraulic monitoring	11/07/1994
Conducted startup round of groundwater sampling	11/07/1994 to 11/17/1994
Revised inorganic discharge limits for groundwater treatment plant from Ohio EPA	11/22/1994
Commenced extraction of groundwater from intermediate unit extraction wells	12/01/1994
Completed on-site soil incineration	04/03/1995
Extraction wells shut down	05/09/1995
Commenced installation of final site cover	06/01/1995
Installed additional monitoring wells, abandoned extraction wells	06/19/1995 to 07/18/1995
Pre-final site inspection	07/28/1995
Completed final site cover	08/04/1995
Final site inspection	08/23/1995
Preliminary Close-Out Report	09/18/1995
Summit National Facility Trust submitted Notice of Completion of Remedial Action, Remedial Action Report, and Operation & Maintenance Plan to agencies	11/02/1995
First Five-Year Review site inspection	07/13/1998
Completion of First Five-Year Review	09/23/1998
Second Five-Year Review site inspection	08/04/2003
Completion of Second Five-Year Review	09/22/2003
Groundwater collection and treatment system shut down	08/2005
Third Five-Year Review site inspection	07/03/2008
Completion of Third Five-Year Review	08/25/2008
Fourth Five-Year Review site inspection	12/11/2012
Environmental covenant recorded	06/05/2013

III. Background

Physical Characteristics

The Summit National site is located at 1240 Alliance Road in Deerfield Township, Portage County, approximately 45 miles southeast of Cleveland, Ohio. It is a roughly rectangular property at the southeast corner of the intersection of Ohio Route 225 and U.S. Route 224. Prior to the remedial construction, the site contained the remains of a coal tipple and a scale house in the northwest corner, two dilapidated buildings in the northeast corner, the abandoned incinerator and two small buildings in the southeast corner, and two ponds (referred to as the east pond and the west pond) across the center of the property. All of these features were removed during the final cleanup.

Portage County is in the northwestern portion of the glaciated Allegheny Plateau and lies on the divide between the Lake Erie and the Ohio River drainages. The hydrogeology of the site is complex. The strata at the site have been characterized as three separate hydrogeologic units: the water table unit (WTU), the upper and lower intermediate units (UIU and LIU) and the Upper Sharon aquifer. The WTU is generally from 5 to 12 feet below grade and flows to the southeast. Groundwater in the UIU flows generally southeastward and in the LIU it flows westward. The Upper Sharon aquifer flows to the north.

Land Use and Resources

Prior to 1974, the 11.5 acre site was formerly a coal strip mine and contained a coal wash pond and coal stockpile. The site was used for storage and disposal of industrial waste and incineration of liquid waste from April 1974 until June 1978. The site is bordered by a skating rink, a school bus storage facility and a residence to the north, a permitted solid waste landfill to the west, an undeveloped brushy wooded area to the east, and a commercial concrete facility and an old unpermitted landfill to the south. The surrounding area is a mix of commercial, agricultural and residential properties.

Approximately 4,500 people live within three miles of the site. Surface water and shallow groundwater in the vicinity of the site flow to the southeast, toward the Berlin Lake reservoir, which is a standby water supply for the City of Youngstown.

History of Contamination

During the period from April 1974 through June 1978, SNLD accepted liquid wastes including oil, PCBs, resins, sludges, pesticides, and plating wastes. Some wastes were mixed with flammable liquids and incinerated on-site. Other wastes were stored in above-ground and underground storage tanks or in drums, or were dumped on the ground.

In June 1973, the owner, Mr. Donald Georgeoff, obtained a permit to install an incinerator. In April 1974, the Ohio EPA issued an operating permit for SNLD. In June 1975, the Ohio EPA investigated a complaint of an unauthorized discharge of waste water. At Ohio EPA's request, U.S. EPA conducted an investigation of the site on October 29, 1976. Evidence of numerous leaks and spills was found. The owner was notified of the need for a Spill Prevention Control Plan, and in December 1976 he was notified that he was in violation of state laws regarding treatment and disposal of industrial wastes. The Ohio EPA issued Final Findings and Orders to the facility on June 12, 1978, requiring it to cease receiving waste materials, remove all liquid waste from the site, and to receive written approval prior to removing any material from the site. No further waste was received after that date.

On March 15, 1979, Mr. Georgeoff sold the property to Mr. Angelo Sottanti. On June 28, 1979, Mr. Sottanti sold the property to Mr. John Vasi. Although Mr. Vasi died in October 1994, he is still listed as the owner of record.

Initial Response

In August 1979, the State of Ohio filed a complaint against Mr. Georgeoff, Mr. Sottanti and Mr. Vasi alleging the operation of a solid waste disposal facility without a permit, creation of a public nuisance, failure to comply with orders from Ohio EPA and installation of facilities for the storage and disposal of liquid wastes without submitting plans to the agency. After an investigation confirmed the presence of more than 7,500 gallons of C-56, U.S. EPA informed Mr. Vasi that remedial action was being planned pursuant to Section 311 of the Clean Water Act. Mr. Vasi declined to take action or to fund a cleanup, so U.S. EPA funded the cleanup of C-56 waste from September through November 1980.

From early spring to late fall of 1980, the Ohio EPA fenced the site, graded the surface to control surface water run on and runoff, identified the contents and staged about 2,000 drums, characterized the contents of several bulk tanks, and installed two on-site and four off-site monitoring wells.

During 1980 and 1981, some of the companies that had brought waste to the site identified themselves and voluntarily removed their wastes.

In November 1980, an agreement was reached between the State of Ohio and eight generators that provided $2.5 million for a surface cleanup. The cleanup operation included removal of 17,000 drums, bulk tanks, the concrete pit and its contents, surface debris, and a small amount of contaminated soil. The surface cleanup was concluded in June 1982.

During the spring of 1987, the U.S. EPA Region 5 Emergency Response Section responded to an emergency situation involving periodic overflows from the east pond to an adjacent residential property. The response included the removal of a buried tank near the incinerator.

Basis for Taking Action

Hazardous substances and other contaminants that have been released at the site in each medium include a variety of volatile organic chemicals (VOCs), semivolatile organic chemicals (SVOCs), pesticides, PCBs and inorganic chemicals (metals). The contaminants are shown below for soils (Table 2), sediments (Table 3), surface water (Table 4), and groundwater (Table 5).

Table 2: Contaminants Found in Soils

VOCs	SVOCs/ Pesticides / PCBs	Inorganics
Methylene chloride	Phenol	Arsenic
Acetone	1,4-dichlorobenzene	Barium
Carbon disulfide	1,2-dichlorobenzene	Beryllium
1,1-dichloroethene	Isophorone	Chromium
1,1-dichloroethane	1,2,4-trichlorobenzene	Copper
Trans-1,2-dichloroethene	Naphthalene	
1,2-dichloroethane	2-methylnaphthalene	
2-butanone (MEK)	Fluorene	
1,1,1-trichloroethane	Hexachlorobenzene	
Trichloroethene	Phenanthrene	
Benzene	Di-n-butylphthalate	
4-methyl-2-pentanone	Butylbenzylphthalate	
Tetrachloroethene	Bis-2-thylhexylphthalate	
Toluene	Di-n-octylphthalate	
Chlorobenzene	Indeno(1,2,3-c,d)pyrene	
Ethylbenzene	Dibenz(a,h)anthracene	
Xylenes (total)	Benzo(g,h,i)perylene	
	4,4-DDT	
	PCBs (total)	

Table 3: Contaminants Found in Sediments

VOCs	SVOCs / Pesticides/ PCBs	Inorganics
Methylene chloride	N-nitrosodiphenylamine	Barium
Acetone	Hexachlorobenzene	Chromium
1,1-dichloroethene	Di-n-butylphthalate	Copper
1,1-dichloroethane	Bis-2-ethylhexylphthalate	Mercury
Trans-1,2-dichloroethene	Di-n-octylphthalate	Cyanide
1,2-dichloroethane	PCBs (total)	
1,1,1-Trichloroethane		
Trichloroethene		
2-butanone		
Toluene		
Benzene		
Ethylbenzene		
Chlorobenzene		
Xylenes (total)		

Table 4: Contaminants Found in Surface Water

VOCs	SVOCs / Pesticides/ PCBs	Inorganics
Methylene chloride	Phenol	Arsenic
Acetone	Aniline	Barium
1,1-dichloroethane	1,4-dichlorobenzene	Beryllium
1,2-dichloroethane	1,2-dichlorobenzene	Cadmium
2-butanone (MEK)	Hexachloroethane	Chromium
1,1,1-trichloroethane	Isophorone	Nickel
4-methyl-2-pentanone	Benzoic acid	
Tetrachloroethene	Bis-2-ethylhexylphthalate	
Toluene	Benzo(b)fluoranthene	
Chlorobenzene	Benzo(k)fluoranthene	
Xylenes (total)	Benzo(a)pyrene	
	Indeno(1,2,3-c,d)pyrene	
	Dibenz(a,h)anthracene	
	Benzo(g,h,i)perylene	

Table 5: Contaminants Found in Groundwater

VOCs	SVOCs / Pesticides/ PCBs	Inorganics
Methylene chloride	4-methylphenol	Aluminum
Acetone	2,4-dimethylphenol	Arsenic
1,1-dichloroethane	4-chloro-3-methylphenol	Barium
1,2-dichloroethane	Phenol	Cadmium
2-butanone	Isophorone	Chromium
1,1,1–trichloroethane (TCE)	Naphthalene	Manganese
Trichloroethane	2-methylnaphthalene	Nickel
4-methyl-2-pentanone	Bis-2-ethylhexylphthalate	Tin
Toluene	Pyrene	Barium
Ethylbenzene	Dimethylphthalate	
1,1–dichloroethene	Di-n-octylphthalate	
Trans-1,2-dichloroethene	Acenaphthalene	
Benzene	Dibenzofuran	
Xylenes (total)	Diethylphthalate	
Tetrachloroethene (PCE)	Fluorene	
	Hexachlorobenzene	
	Phenanthrene	
	Anthracene	
	Di-n-butylphthalate	
	Fluoranthene	
	Butylbenzylphthalate	
	Hexachlorocyclopentadiene	

IV. Remedial Actions

Remedy Selection

U.S. EPA issued a ROD on June 30, 1988, and later issued an amended ROD on November 2, 1990.

The implemented remedy was designed to address three major remedial action objectives:

- Protection and enhancement of the quality of the groundwater and recovery of the groundwater resource in the vicinity of the site.
- Protection of the quality of the surface water in the vicinity of the site.
- Protection of the public from direct contact with contaminated material on or near the site, and from migration of surficial contaminants via surface runoff, wind erosion and volatilization.

The June 1988 ROD selected the following remedy:

- Limiting access and implementing deed restrictions to limit future uses of the site.
- Monitoring surface water and groundwater.
- Removal of on-site structures and placing debris in an off-site permitted landfill or under the onsite multi-layer cap.
- Excavating and onsite incineration of "hot spot" soils, sediments, buried drums and tanks including their contents.
- Placement of all incinerated material in an on-site Resource Conservation and Recovery Act (RCRA) landfill.
- Installation of a multilayer cap over the entire site and a vertical barrier (slurry wall) around the perimeter of the site.
- Installation of wells over the site to extract and treat groundwater on-site.
- Eliminating on-site surface water and treating it along with the groundwater treatment system.
- Rerouting of the southern and eastern ditches to an area off-site.
- Regrading and revegetating the site surface.

- Relocating the Watson residence and Cement Plant property to another area not affected by the site.

The November 1990 amended ROD called for the following:

- Expansion of site boundaries to encompass contaminated areas along the perimeters and the south drainage ditch and construction of an eight-foot chain link fence around the expanded boundary.

- Excavation and on-site incineration of 24,000 cubic yards of contaminated on-site soils, 4,000 cubic yards of contaminated perimeter sediments, and the contents of an estimated 900 to 1,600 buried drums.

- Demolition of on-site structures for on-site disposal.

- Collection and treatment of surface water from the two on-site ponds and drainage ditches and the sediments from the ponds.

- Extraction of groundwater from the WTU by a pipe and media drain system along the southern boundary and along the southern ends of the east and west boundaries, and extraction of additional groundwater by extraction wells in the Intermediate Unit.

- Relocation of a vacant residence.

- Testing of incinerated waste material for conformance with Ohio EPA and U.S. EPA standards before placement of the material back on the site as fill, before placement of the final cover. If treated soil did not meet standards, it had to be placed in an on-site RCRA cell.

- Regrading and installation of a soil cover over about 10.6 acres of the site, consisting of an 18-inch loam layer with six inches of topsoil and a vegetative cover.

- Rerouting the south and east drainage ditches to an uncontaminated area beyond the site.

The major differences between the 1988 ROD and the 1990 amended ROD are that the 1988 ROD called for an impermeable cap over the site with an extensive system of 220 extraction wells along with a slurry wall to provide hydraulic containment and dewatering. The 1990 amended ROD required a permeable cover and a passive collection trench, to allow infiltration and gradual removal of contaminants from the soil and groundwater by the ongoing collection and treatment system. The 1990 amended ROD also included extraction wells but only in the Intermediate Unit. In addition, the

1990 amended ROD changed the requirement to excavate soils from between 0-8 feet below ground surface (bgs) to 2 feet bgs.

On March 23, 1992, U.S. EPA signed an ESD with Ohio EPA concurrence. Since some soils at the site contained PCBs at concentrations greater than 50 parts per million, the ESD added TSCA as an ARAR. The ESD also allowed for off-site disposal at a TSCA landfill for PCB-contaminated soils exceeding 50 parts per million in the event that the incinerator was unable to meet TSCA standards during the test burn.

Remedy Implementation

A consent decree (CD) between U.S. EPA, Ohio EPA, and the settling defendants was entered and became effective on June 11, 1991. Pursuant to the CD, the settling defendants formed the Summit National Facility Trust (SNFT) to provide for the performance of the remedial design/remedial action (RD/RA). Following completion of the RD, the RA was implemented in five phases from June 30, 1993, to August 23, 1995. The final site inspection was conducted on August 23, 1995, the Preliminary Close-Out Report was issued on September 18, 1995, and the Notice of Completion was submitted on November 2, 1995.

U.S. EPA and Ohio EPA determined that the RA activities were completed according to the ROD (as amended) and design specifications. Approximately 21,100 tons of soil and sediments were incinerated during the remedial action. Soils in the upper two feet of specifically-designated grids and sediment in the upper two feet of the site ponds were selected by U.S. EPA and Ohio EPA for incineration based on the analytical results presented in the RI Report, which showed concentrations representative of a 3×10^{-5} or greater additional cancer risk under a residential exposure scenario. Incineration was performed at the site from August 1, 1994, through April 3, 1995. Soils were tested for organic concentrations and toxicity characteristic leaching procedure (TCLP) metals in 500-ton batches. No soil batches failed the soil criteria based on TCLP metals. Therefore, the contingent RCRA closure cell was not required. The only change from what was anticipated in the amended ROD was that the contents of 480 overpacked drums were taken off-site for disposal instead of being incinerated on-site. This change was made due to public concern over incineration of the drum contents.

In April 1995, the SNFT submitted an evaluation of the groundwater extraction system to U.S. EPA and Ohio EPA which showed that the groundwater contamination in the WTU was effectively contained by the pipe and media drain system but that the extraction wells installed in the Intermediate Unit were not providing an effective horizontal area of capture to contain groundwater in the Intermediate Unit at the site boundary. The evaluation also showed that the extraction wells in the Intermediate Unit would likely draw contaminants from the WTU into the Intermediate Unit, along portions of the pipe and media drain. The evaluation also concluded that the groundwater drawdown created by the pipe and media drain in the WTU induces a natural upward gradient from the Intermediate Unit to the pipe and media drain. Based on the April 1995 evaluation, U.S. EPA and Ohio EPA approved the shutdown of the extraction

wells at the site in May 1995. The pipe and media drain groundwater collection system continued to operate, along with the groundwater treatment system.

On July 18, 2005, Ohio EPA approved the Work Plan for Ground Water Migration Evaluation for the site that was submitted on June 13, 2005, by the PRP consultant. The plan allowed the PRP to shut down the groundwater collection and treatment system and to continue collecting groundwater hydraulic monitoring data as well as groundwater samples for chemical analysis in order to determine whether the groundwater plume would remain stable without operation of the system. In August 2005, the collection and treatment system was shut down and the sampling event that took place that month was established as the pre-shutdown baseline monitoring event for the groundwater migration evaluation.

Access rights and restrictions on future use were included in the CD. The CD provided that U.S. EPA, Ohio EPA, the settling defendants, and their respective agents have access to the property in order to conduct all necessary activities to implement the remedy. Restrictions on future use, provided by ICs, are discussed below.

Institutional Controls

Institutional controls are required to ensure the protectiveness of the remedy. ICs are non-engineered instruments such as administrative and legal controls that help to minimize the potential for exposure to contamination and protect the integrity of the remedy. ICs are required to assure long-term protectiveness for any areas which do not allow for unlimited use and unrestricted exposure.

The June 1988 ROD stated that the remedy goals included limiting access and implementing deed restrictions to limit future uses of the site. Deed restrictions imply that the ICs will be in the form of proprietary controls which run with the land. Compliance with effective ICs will continue to be ensured through long-term stewardship by implementing, maintaining and monitoring effective ICs as well as maintaining the site remedy components.

U.S. EPA conducted several attempts to locate the legal owner of the site property, Mr. John Vasi. After confirming Mr. Vasi's death and finding no heirs to Mr. Vasi's property, the United States petitioned a federal judge to appoint a receiver for the site property, for purposes of recording an environmental covenant that would impose the same use restrictions of the property as Section V.D.3 of the CD imposed on Mr. Vasi. Those restrictions are described below.

Evaluation of ICs

Section V.D.3 of the June 11, 1991, CD directly imposes on the "Owner Settling Defendant" a prohibition of any activities that would modify, remove, damage, or interfere with the response action. It prohibits any filling, grading, excavating, building, drilling, mining, farming or other development without prior written consent from U.S.

EPA and Ohio EPA. It prohibits extraction, development or use of groundwater or surface water for any purpose. In the event of any future property sale or deed transfer all of the above restrictions shall remain effective. However, although the "Owner Settling Defendant" is bound by these restrictions, he is not required to record those restrictions on the site property until such time as he conveys any interest in the property to someone else (CD; Sections V.D.5 through V.D.7). If the "Owner Settling Defendant" conveys any interest in the site property, the deed, lease, or license transferring such interest must contain the use restrictions delineated above, and those use restrictions must run with the land. Therefore, the CD restricts the owner of the site from interfering with any aspects of the remedial action, protects the integrity of the soil cap, and prohibits the development or use of the site groundwater for any purpose, unless approved by U.S. EPA and Ohio EPA.

U.S. EPA's and Ohio EPA's ability to enforce the CD against the current site owner and the restrictions on site use served as enforceable ICs in the short term. However, given the death of the site owner, and to ensure long-term protectiveness *vis a vis* future owners of the site property, on April 16, 2013, the United States petitioned a federal judge to appoint a receiver for the property. Within a week, the federal judge signed an order appointing a receiver and directing the receiver to execute an environmental covenant that reflects the use restrictions delineated above. The EC was executed by the receiver for the site and then was executed by U.S. EPA on April 30, 2013. The EC was then recorded with the Portage County Recorder on June 5, 2013. The EC is included as Attachment 11.

Table 6 below summarizes the institutional controls for the Summit National site.

Table 6: Summary of Institutional Controls for Restricted Areas

Media, remedy components & areas that do not support UU/UE based on current conditions	*Objectives of IC*	*Title of Institutional Control Instrument Implemented*
Land – On Site	Prohibit any filling, grading, excavating, building, drilling, mining, farming or other development on property within the site, except for activities required pursuant to the Consent Decree.	EC per the UECA, recorded with Portage County Recorder on June 5, 2013.
Groundwater – On Site current area that exceeds groundwater cleanup standards	Prohibit groundwater use, extraction, or development until cleanup standards are achieved.	EC per the UECA, recorded with Portage County Recorder on June 5, 2013.
Surface Water – On Site	Prohibit use of surface water within the site for any purpose.	EC per the UECA, recorded with Portage County Recorder on June 5, 2013.
Other Remedial Action Components	Prohibit inconsistent uses and protect the integrity of the remedy components.	EC per the UECA, recorded with Portage County Recorder on June 5, 2013.

Maps which depict the current conditions of the site and areas which do not allow for UU/UE were developed as part of the implementation of institutional controls. The ICs apply to the entire site area shown in the second figure in Attachment 2 and in Exhibit B to the EC (see Attachment 11).

Current Compliance: Access to the site is restricted by a fence. Based on inspections and interviews with the site manager, U.S. EPA is not aware of site or media uses which are inconsistent with the stated objectives of the ICs.

Long-Term Stewardship: Long-term protectiveness at the site requires compliance with use restrictions to assure the remedy continues to function as intended. Use restrictions are now in place, with the EC that was recorded on June 5, 2013. To assure proper maintenance and monitoring of effective ICs, long-term stewardship procedures will be put in place as part of the OMMP. These procedures will be reviewed by the responsible party on an annual basis to ensure proper monitoring and enforcement of the ICs at the site. The OMMP will include regular inspection of the ICs at the site and annual certification to U.S. EPA that the ICs are in place and effective. Additionally, use of a communications plan and use of a one-call system should be explored for long-term stewardship.

System Operations/Operation and Maintenance

Operation of the groundwater collection system and on-site treatment of contaminated water was conducted in accordance with the OMMP from November 1995 through August 2005.

The primary activities associated with meeting the remedial action objectives at the site include long-term operation, maintenance, and monitoring of the groundwater collection/extraction system, groundwater treatment system, and treated water discharge system, and inspection and maintenance of the site cover and fence.

Groundwater treatment plant monitoring consisted of monthly influent and treated effluent sampling and analysis, and recording of daily flow rates. Results were submitted to the Ohio EPA and U.S. EPA monthly through August 2005.

Groundwater quality monitoring was conducted at startup and twice per year for the first five years of operation, and annually thereafter. Groundwater hydraulic monitoring was performed monthly for the first year of operation, then quarterly through August 2005, then twice per year through 2008, and annually since 2009.

For the first three rounds of groundwater quality monitoring, the samples were analyzed for the full target compound list (TCL) and target analyte list (TAL). A site-specific indicator parameter list (SSIPL) was then developed and approved by Ohio EPA and U.S. EPA. All subsequent samples were analyzed for the SSIPL, except that every fifth year the full TCL/TAL analysis is done. Groundwater monitoring reports are submitted

to U.S. EPA and Ohio EPA for each monitoring event. Annual evaluation and progress reports are also submitted to Ohio EPA and U.S. EPA.

Operation and maintenance (O&M) activities for the site cover consist of periodic inspections of the cover to ensure that the cover is maintained. Monitoring wells and the site fence are inspected and maintained as well.

Table 7 below shows the annual O&M costs at the site from 2008 through 2012.

Table 7: O&M Costs

SUMMIT NATIONAL SUPERFUND SITE O&M COSTS Years 2008 thru 2012					
	2008	2009	2010	2011	2012
Accounting	$ 19,279	$ 15,378	$ 15,133	$ 14,661	$ 13,044
Insurance	$ 5,231	$ 2,465	$ 3,151	$ 2,789	$ 5,728
Consulting and Laboratory	$ 44,980	$120,031	$ 34,995	$ 33,304	$ 92,763
Maintenance	$ 44,552	$ 13,610	$ 19,899	$ 10,131	$ 3,661
Utilities/Supplies	$ 14,769	$ 17,125	$ 8,451	$ 6,648	$ 8,206
Agency Oversight	$ 1,185	$ 23,848	$ 1,744	$ 20,019	$ 4,416
Total	$ 129,997	$ 192,457	$ 83,372	$ 87,552	$ 127,818

V. Progress Since the Last Five-Year Review

The Third Five-Year Review Report was issued on August 22, 2008. That report concluded that the remedy was protective of human health and the environment because exposure pathways to contaminated groundwater were being controlled and exposure to contaminated soil at the site had been addressed by incinerating the most heavily contaminated soils, applying a cover of clean soil and a vegetative cover, and by installing fencing. The 2008 five-year review stated that, in order to be protective in the long term, ICs needed to be implemented, compliance with ICs needed to be assured, and groundwater cleanup goals needed to be attained.

The 2008 five-year review included recommendations to address issues that were noted during the review. Table 8 below shows the actions that have been taken since the last five-year review to address the recommendations made during that review.

Table 8: Actions Taken Since the Last Five-Year Review

Issues from Previous Review	Recommendations/ Follow-up Actions	Party Responsible	Milestone Date	Action Taken and Outcome	Date of Action
Institutional controls: Effective ICs must be implemented, monitored, maintained and enforced to assure that the remedy is functioning as intended with regard to the ICs. Once preliminary IC activities are completed, U.S. EPA will seek to have an Environmental Covenant under Ohio's version of the Uniform Environmental Covenants Act recorded in the chain of title for the site.	a) The PRPs must complete the following activities to assure that effective ICs are implemented, monitored, maintained, and enforced: i) accurate mapping of all areas that require land and groundwater restrictions; ii) performing and reviewing title work; iii) proposing an EC under UECA to be recorded, and iv) proposing revisions to the OMMP to ensure long-term stewardship such as including mechanisms to ensure regular inspections of ICs at the site. b) An IC Plan will be prepared by U.S. EPA documenting IC activities conducted by the PRPs and necessary follow-up activities. The IC Plan will assure planning for implementation of the EC as per the UECA.	PRPs U.S. EPA	March 2009 September 2009	Mapping and title work was completed and and EC developed. After learning through the work of a civil investigator that the site owner was deceased and that there were no heirs to the site property, U.S. EPA referred the case to the U.S. Department of Justice. The United States filed a motion in federal court asking that a receiver be appointed to execute an EC for the site. The judge appointed a receiver, and the EC was executed and recorded with the Portage County Recorder on June 5, 2013. U.S. EPA determined that an IC Plan was not necessary.	June 5, 2013
Long-term Stewardship: Long-term stewardship needs to be assured for the site. This will be provided by annual certifications that current site use is compatible with the restrictions set forth in the EC, and modifications to the OMMP to ensure the monitoring and enforcement of ICs.	Annual certifications and modifications to the OMMP will ensure the proper monitoring and enforcement of ICs.	U.S. EPA	December 2009	The EC was recorded with the Portage County Recorder on June 5, 2013. The OMMP can now be (and will be) revised to include long-term stewardship of the ICs.	June 5, 2013

VI. Five-Year Review Process

Administrative Components

The five-year review for the Summit National site was conducted by Pablo N. Valentín, U.S. EPA RPM for the site.

The RPM established a review schedule from October 1, 2012, through July 2013 whose components included the following items:

- community notification and involvement;
- document review;
- data review;
- site inspection;
- local interviews; and
- five-year review report development and review.

Community Notification and Involvement

Activities to involve the community in the five-year review were initiated with a public notice prepared by U.S. EPA that was published in the Record-Courier newspaper on November 5, 2012, informing people that a five-year review was to be conducted at the Summit National site (see Attachment 6). The notice informed members of the public about the initiation of the five-year review process and provided them with the opportunity to request additional information from U.S. EPA. U.S. EPA received no inquiries about the five-year review process.

Document Review

This five-year review consisted of a review of relevant documents including OMMP records and monitoring data. U.S. EPA also reviewed applicable groundwater cleanup standards, as listed in the 1988 ROD and 1990 amended ROD. A comprehensive list of documents reviewed is included as Attachment 3.

Data Review

Monitoring of groundwater contaminant concentrations, hydraulic containment and the groundwater treatment system (while it was operating) have been ongoing since November 1994. These data are regularly reported to and reviewed by Ohio EPA and U.S. EPA. For this five-year review, all data from 1994 through 2012 were reviewed[1].

[1] The groundwater monitoring data from the April 2013 sampling event was not yet available when this five-year review report was written.

Groundwater Monitoring

No significant changes in the groundwater flow patterns have been noted since the shutdown of the groundwater collection and treatment system in 2005. Groundwater concentrations in downgradient off-site monitoring wells have remained either non-detect or similar to the concentrations detected since the 2004 baseline sampling event for the shutdown evaluation. The increasing concentration trend at on-site monitoring well MW-108 was extensively evaluated in the 2009 groundwater monitoring report. This evaluation concluded that there was evidence of increasing parameter concentrations during the post-shutdown period relative to earlier contaminant levels, but the detected compounds did not show signs of migration beyond the site boundaries. The 2012 analytical data from MW-108 again shows an increase in SSIPL concentrations; however, the detected compounds remain contained within the site boundary.

The reinstatement conditions for the groundwater treatment system were outlined in the SNFT's August 2006 Groundwater Monitoring Report (CRA, January 19, 2007) and were then amended on July 23, 2007. The contingency actions are as follows:

> *"If VOCs above their respective maximum contaminant level (MCL) are detected in the sentinel wells (off-site downgradient WTU monitoring wells MW-114 and MW-115), SNFT will evaluate options to mitigate the release (e.g., restart the groundwater extraction system, implement in-situ chemical oxidation (ISCO) to treat the released groundwater, phytoremediation, etc.). The sentinel wells are located 70 to 80 feet south of the southern property boundary and wet well of the pipe and media drain. During pumping of groundwater from the pipe and media drain, the WTU zone of groundwater capture extends 100 to 200 feet south of the pipe and media drain at the wet well. In this case, off-site downgradient WTU monitoring wells MW-116, MW-117, and MW-118 (approximately 230 feet south of the southern property boundary) will be used to verify whether there is any long term impact to the groundwater south of the site and outside the influence of the pipe and media drain."*

Based on a review of the groundwater monitoring data collected since the 2008 five-year review, including the April 2012 data, there have been no detections of VOCs at sentinel well MW-114 and the concentrations for the two VOCs detected at sentinel well MW-115 are consistent with past events and below their MCLs. Therefore, U.S. EPA and Ohio EPA agree that no contingency actions need to be taken at this time, and the groundwater collection and treatment system can remain off, pending the results of the April 2013 groundwater sampling event.

A more detailed discussion of the groundwater monitoring results is presented below. Attachment 7 presents comparisons between the 2004 baseline sampling event and the 2009, 2010, 2011, and 2012 groundwater sampling events in the WTU and UIU. Table 9, which follows the discussion below, shows the results from the most recent groundwater sampling event in April 2012.

WTU Monitoring Wells – On-Site

The April 2012 monitoring results at MW-11 showed that the concentrations of the SSIPL compounds were similar to or trending down compared to the 2011 concentrations and were lower than the concentrations in the 2004 baseline sampling event. At MW-107, the concentrations of the SSIPL compounds were either similar to, trending up, or trending down when compared to 2011 concentrations, but were generally lower than the 2004 baseline except for 1,1-dichloroethane, benzene, ethylbenzene, and xylene. At MW-108, MW-111, and MW-113, the concentrations of the SSIPL compounds were similar to or trending up compared to the 2011 concentrations, but were lower than the 2004 baseline. At MW-108, the concentrations of the SSIPL compounds were higher than the concentrations in the 2004 baseline sampling event. At MW-111 and MW-113, the concentrations of the SSIPL compounds were similar to or lower than the concentrations in the 2004 baseline.

Overall, the SSIPL concentrations in on-site WTU wells in 2012 were less than the 2004 baseline concentrations. Minor fluctuations in concentrations occurred between 2011 and 2012, but the changes measured were within historical ranges. Minor fluctuations in concentrations are expected in the on-site WTU wells because of their location near the former waste disposal area. Variations in water table position, slight changes in flow pathways, and natural attenuation will result in the fluctuations noted.

WTU Monitoring Wells – Off-Site

Concentrations of the SSIPL compounds at MW-4 and MW-114 were non-detect for the 2011 and 2012 sampling events, which is consistent with the 2004 baseline sampling event and later sampling efforts. At MW-115, low concentrations of 1,1-dichloroethane and cis-1,2-dichloroethene were similar to the 2010 and 2011 concentrations and remain within the range of concentrations detected since 2004.

UIU Monitoring Wells

SSIPL compounds were non-detect in the on-site UIU wells sampled in 2012, which is consistent with the eight previous sampling events. SSIPL compounds also were non-detect in the off-site UIU wells sampled in 2012. Acetone, which has previously been detected at select UIU wells, was not detected in the 2011 or 2012 samples.

Table 9: Summary of April 2012 Groundwater Monitoring Data

Parameter	WTU Monitoring Wells April 2012 All Sample results are in µg/l								
	MCL	MW-4	MW-11	MW-107	MW-108	MW-111	MW-113	MW-114	MW-115
1,1,1-trichloroethane	200	ND (1.0)*	24.4	57.1	6.1	1.6	ND (1.0)	ND (1.0)	ND (1.0)
1,1-Dichloroethane	-	ND (1.0)	63.3	.1610	329	32.2	ND (1.0)	ND (1.0)	2.0
1,2-Dichloroethane	5	ND (1.0)	1.3	210	68.5	73.7	ND (1.0)	ND (1.0)	0.48J
Acetone	-	ND (5.0)	ND (5.0)	ND (25)	ND (5.0)	ND (5.0)	5.9	ND (5.0)	ND (5.0)
Benzene	5	ND (1.0)	0.55 J	89.1	120	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Chlorobenzene	100	ND (1.0)	ND (1.0)	51.9	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Chloroethane	-	ND (1.0)	ND (1.0)	ND (5.0)	ND (1.0)	1.2	ND (1.0)	ND (1.0)	ND (1.0)
Cis-1,2-Dichloroethene	70	ND (1.0)	44.2	208	199	6.3	ND (1.0)	ND (1.0)	7.4
Ethylbenzene	700	ND (1.0)	ND (1.0)	907	0.81 J	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Toluene	1,000	ND (1.0)	ND (1.0)	1510	1.1	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Trans-1,2-Dichloroethene	100	ND (1.0)	1.6	2.7 J	5.8	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Trichloroethene	5	ND (1.0)	75.6	5.1	31.0	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Vinyl Chloride	2	ND (1.0)	4.1	142	119	6.2	ND (1.0)	ND (1.0)	ND (1.0)
Xylene (total)	10,000	ND (1.0)	ND (1.0)	3320	0.32 J	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)

Parameter	UIU Monitoring Wells April 2012 All Sample results are in µg/l				
	MW-207	MW-209	MW-209 (Duplicate)	MW-220	MW-224
1,1,1-trichloroethane	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
1,1-Dichloroethane	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
1,2-Dichloroethane	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Acetone	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)
Benzene	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Chlorobenzene	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Chloroethane	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Cis-1,2-Dichloroethene	ND (1.0) ND (1.0)	ND (1.0) ND (1.0)	ND (1.0) ND (1.0)	ND (1.0) ND (1.0)	ND (1.0) ND (1.0)
Ethylbenzene	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Toluene	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Trans-1,2-Dichloroethene	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Trichloroethene	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Vinyl Chloride	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Xylene (total)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)

* (x) – numbers between parenthesis refer to detection limits

Groundwater Treatment

The groundwater collection and treatment system was in operation from November 1995 through August 2005, at which time it was shut down. During its operation, the treatment system was compliant with the discharge limits established by Ohio EPA. There were no significant exceedances for any organic or inorganic parameters. Since there has been no indication of adverse impact to the off-site groundwater in the WTU or the UIU groundwater units, either before any remedial action at the site, during the 10 years of active groundwater pump and treatment operations, or in the years following the 2005 shutdown of the groundwater extraction and treatment system, the groundwater extraction and treatment system will remain off pending the results of the next groundwater sampling event, which took place in April 2013.

Hydraulic Containment

Review of hydraulic monitoring data since the startup of the groundwater collection system, in conjunction with a review of the groundwater quality monitoring data, have shown that hydraulic containment has been consistently maintained, even following shutdown of the groundwater collection and treatment system. Groundwater hydraulic monitoring is currently being performed annually. The April 2012 groundwater elevation contours (see Attachment 8) demonstrate that the horizontal direction of groundwater flow is generally southeasterly in the WTU, as it has been consistently observed in the past. The groundwater flow direction in the UIU is generally easterly and is consistent with the pre-shutdown groundwater flow direction in this unit. As discussed earlier, the results of the groundwater quality monitoring demonstrate that site contamination has not migrated off-site.

Site Inspection

Ohio EPA has served as the primary oversight agency at the site since 1996. The Ohio EPA Site Coordinator periodically conducts site visits and regularly reviews all monthly, quarterly, and annual monitoring reports. Pablo N. Valentín, U.S. EPA RPM, and Regan Williams, Ohio EPA Site Coordinator, met with representatives of the SNFT on December 11, 2012, to conduct an inspection of the Summit National site for purposes of this five-year review. The site inspection began with an interview of the PRP's Site Manager. The results of the interview are incorporated into this report and also are reflected in Attachment 4, the Site Inspection Checklist. The inspection covered the entire site, including the inactive groundwater treatment plant, the site offices and computer facilities, the site perimeter and fence, the on-site and off-site monitoring well system, the pipe and media drain and wet well, the east and south drainage ditches, and the treatment plant effluent discharge point. Photographs were taken of all significant site features and are included as Attachment 5.

No significant issues were identified regarding the groundwater treatment system, the hydraulic containment system, the site cover, or the building. As noted earlier, the groundwater collection and treatment system has been shut down since August 2005 to evaluate whether the groundwater plume remains stable without operating the system. Based on the groundwater monitoring data collected so far during the shutdown period, there is no evidence that groundwater contamination is moving away from the site.

There have been no incidences of trespassing, vandalism or other external problems. No complaints from nearby residents have been received by the Site Manager, the Ohio EPA Site Coordinator or the U.S. EPA RPM. Additionally, there are no site or media uses occurring which are incompatible with the stated objectives of the ICs.

Interviews

Besides the interview with the Site Manager (noted in the Site Inspection section above), no other interviews were conducted for the five-year review.

VII. Technical Assessment

Question A: Is the remedy functioning as intended by the decision documents?

Yes. Based on a review of relevant documents, ARARs, risk assumptions, and the results of the site inspection, the remedy appears to be functioning as intended by the decision documents (1988 ROD, 1990 ROD amendment, and 1992 ESD) and is expected to continue to do so. The contamination left on-site is in soil and groundwater. The remaining contaminants in soil and groundwater are effectively contained by the remedy and are gradually being reduced. Contaminated soils are covered with 2.5 feet of clean soil and also by a vegetative cover, and the site is entirely fenced. Contaminated groundwater was effectively contained within the site boundaries by the pipe and media drain groundwater collection system during its operation (1995-2005) and also by the low permeability of the hydrogeologic units. The groundwater treatment plant consistently met the discharge limits established by the Ohio EPA during its operation, and even though the groundwater collection and treatment system was shut down in 2005, contaminated groundwater has not migrated off-site. The required ICs have been implemented, in the form of an EC recorded on June 5, 2013, and there are no site or media uses occurring which are incompatible with the stated objectives of the ICs.

Question B: Are the exposure assumptions, toxicity data, cleanup levels, and remedial action objectives used at the time of the remedy selection still valid?

No. The original exposure assumptions and remedial action objectives are still valid, but there have been some changes to toxicity factors and cancer slope factors since the time the remedy was selected. However, the changes do not affect the protectiveness of the remedy. The toxicity values that are the basis for the risk-based groundwater performance standards that are part of the selected remedy have changed over the years; some have increased and some have decreased. A table comparing the current performance standards with projected new standards for certain chemicals – if the standards were to be calculated based on current carcinogenic and non-carcinogenic risk factors – is included as Attachment 8. If calculated today based on current toxicity values, the performance standards for benzene, 1,2-dichloroethane, PCE, TCE and vinyl chloride would likely become more stringent compared to the standards in the selected remedy, while the standard for chloroethane would likely become less stringent. At this time, however, there does not appear to be any reason to revise the performance standards for the site.

Current groundwater contaminant concentrations within the site boundaries are still well above the groundwater performance standards, and it appears that it will be many years before the concentrations will fall below those standards.

Question C: Has any other information come to light that could call into question the protectiveness of the remedy?

No. No new information has come to light that could affect the protectiveness of the remedy.

Technical Assessment Summary

After review of all available data and the results of the site inspection, the remedy appears to be functioning as intended by the ROD, as modified by the ROD amendment and ESD. There have been no changes in the physical conditions of the site that would affect the protectiveness of the remedy. There have been no changes to the standardized risk assessment methodology that would affect the protectiveness of the remedy at this time, although it may be necessary to revisit the risk-based performance standards in the future, when groundwater concentrations begin to approach the final performance standards.

There have been some changes in toxicity factors and cancer slope factors since the cleanup standards were developed for groundwater; however, these changes do not affect the protectiveness of the remedy. Contaminated groundwater is contained within the site boundaries and there is no evidence of contaminated groundwater migrating off-site. Although there are some fluctuations in contaminant concentrations in the groundwater beneath the site, the groundwater contamination is essentially not moving. The organic contaminants in groundwater beneath the site were not even reaching the groundwater collection trench during the operation of the groundwater collection and treatment system, as evidenced by the lack of volatile contaminants in the influent to the treatment plant during its operation from 1995 through 2005.

There is no other information that calls into question the protectiveness of the remedy.

VIII. Issues

No issues that affect the protectiveness of the remedy were identified during this five-year review. The required ICs for the site are now in place, with the UECA-compliant EC recorded on June 5, 2013. Long-term stewardship now needs to be assured for the site.

IX. Recommendations and Follow-Up Actions

No issues that affect the protectiveness of the remedy were identified during this five-year review, so there are no corresponding recommendations and follow-up actions. As noted above, long-term stewardship needs to be assured for the site. Long-term

stewardship procedures will be put in place as part of the OMMP. These procedures will be reviewed by the responsible party on an annual basis to ensure proper monitoring and enforcement of the ICs at the site. The OMMP will include regular inspection of the ICs at the site and annual certification to U.S. EPA that the ICs are in place and effective. U.S. EPA anticipates that the SNFT will revise the OMMP to include long-term stewardship procedures by September 2013.

X. Protectiveness Statement

This Fourth Five-Year Review concludes that the remedy is protective of human health and the environment. Exposure pathways to contaminated groundwater are being controlled and exposure to contaminated soil at the site has been addressed by incinerating the most heavily-contaminated soils, applying a clean soil cover and a vegetative cover, and by fencing that surrounds the site. All required ICs have been implemented, with an EC under the Ohio UECA recorded on June 5, 2013. Compliance with effective ICs will be ensured through long-term stewardship by maintaining, monitoring, and enforcing effective ICs.

XI. Next Review

The next five-year review for the Summit National site is required within five years of the signature date of this review.

Attachment 1

Site Location Map

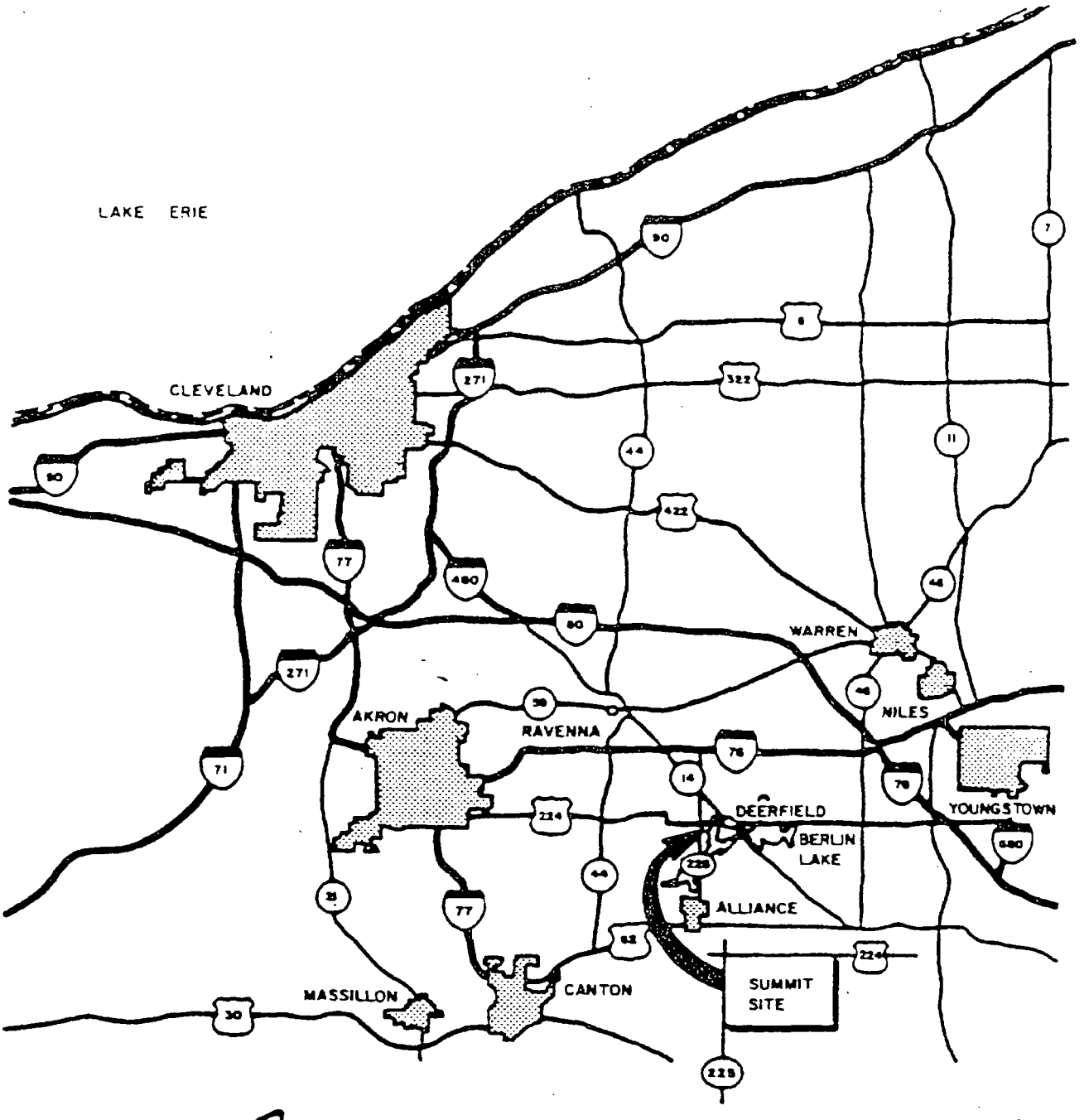
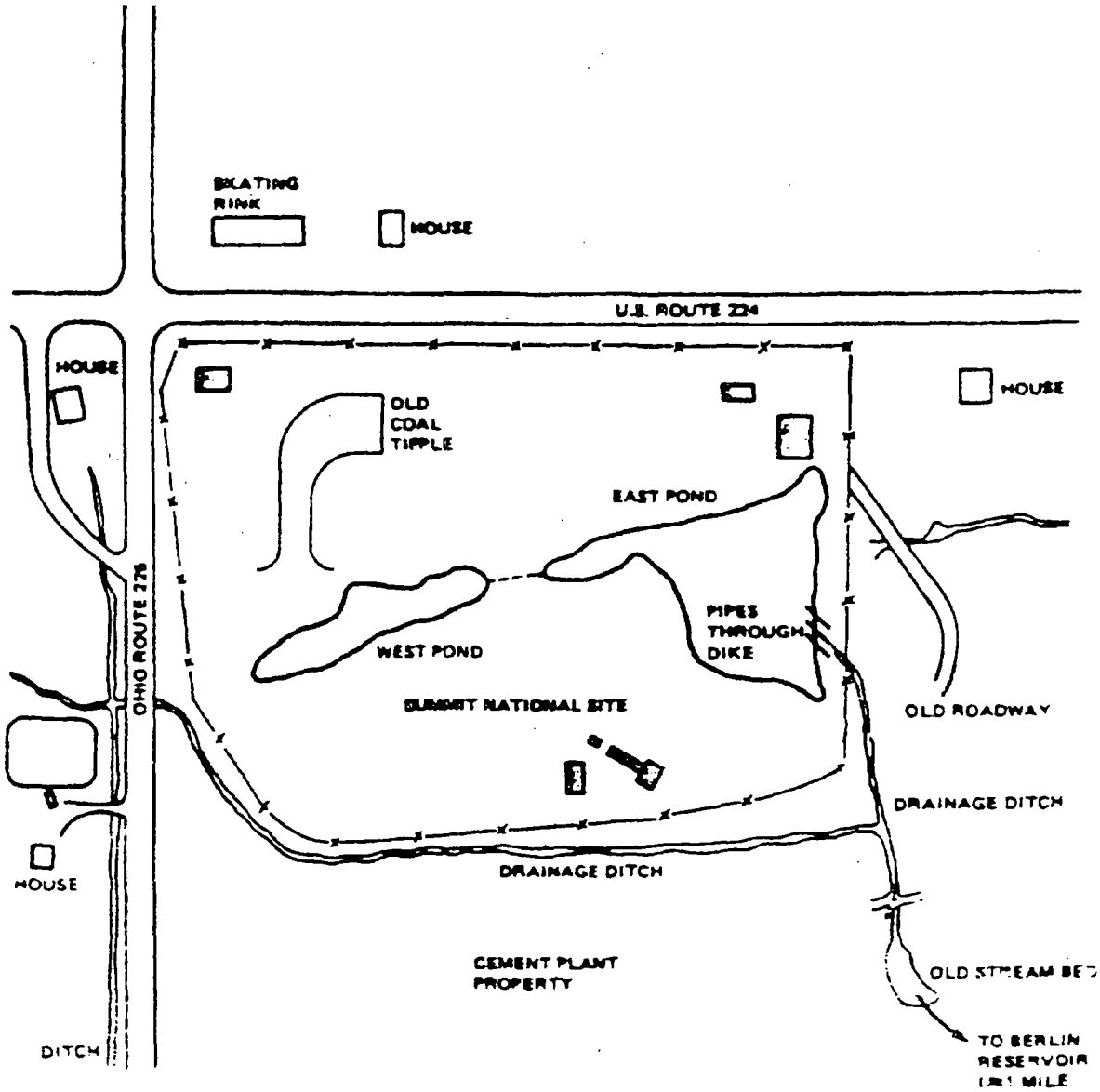


FIGURE 1
SUMMIT SITE LOCATION
SUMMIT NATIONAL FS

Attachment 2

Drawings of Site Features



NOTE: ALL LOCATIONS OF STRUCTURES AND PHYSICAL FEATURES APPROXIMATE.

FIGURE E-1
SITE MAP

Institutional Control (IC) Review
Site Base Map

Superfund
U.S. Environmental Protection Agency

Summit National
Portage County, OH

OHD980609994

Legend

Summit National Site

0 500 1,000 Feet

N

GEOS

RPM: Pablo Valentin

Produced by Sarah Backhouse
U.S. EPA Region 5 on 6/13/07
Image Date: 2005

Attachment 3

List of Documents Reviewed

CH2M Hill; 1988 -**Feasibility Study Report - Summit National Superfund Site** - February 10, 1988

CH2M Hill; 1988 - **Remedial Investigation Report - Summit National Superfund Site** – January 11, 1988

Conestoga-Rovers & Associates; 1994 through 2008 - **Annual Progress Reports- Summit National Superfund Site**

Conestoga-Rovers& Associates; 1993 - **Final Design Report- Summit National Superfund Site** - May 27, 1993

Conestoga-Rovers & Associates; 1994 through 2008 - **Groundwater Monitoring Reports- Summit National Superfund Site**

Conestoga-Rovers & Associates; 1994 through 2008 - **Hydraulic Monitoring Reports- Summit National Superfund Site**

Conestoga-Rovers & Associates; 1999 - **Interim Evaluation of Remedial Action- Summit National Superfund Site** - March 4, 1999

Conestoga-Rovers & Associates; 1995 - **Operation, Maintenance and Monitoring Plan- Summit National Superfund Site** - November 3, 1995

Conestoga-Rovers & Associates; 1995 - **Remedial Action Report- Summit National Superfund Site** - October 31, 1995

Ohio EPA; 1998 - **Five Year Review Report- Summit National Superfund Site** – October 21, 1998

Ohio EPA; 1998 – **Second Five Year Review Report- Summit National Superfund Site** – September 22, 2003

Ohio EPA; 1994 - **Substantive Permit to Discharge- Summit National Superfund Site** – May 18, 1994

Summit National Facility Trust; 1994 through 2008 - **Monthly Effluent Reports for the Groundwater Treatment Plant- Summit National Superfund Site**

United States Environmental Protection Agency (USEPA); 2001 - **Comprehensive Five-Year Review Guidance, June 2001** - Office of Solid Waste and Emergency Response (OSWER) Directive 9355.7-03B-P

United States Environmental Agency; 1988 - **EPA Superfund Record of Decision: Summit National** - June 30, 1988

United States Environmental Protection Agency; 1990 - **EPA Superfund Record of Decision: Summit National** - November 2, 1990

United States Environmental Protection Agency; 1992 - **Explanation of Significant Difference Summit National Superfund Site** - March 23, 1992

Consent Decree (Civil Action number C81-1961) - Summit National Superfund Site - June 11, 1991

Attachment 4

Site Inspection Checklist

Please note that "O&M" is referred to throughout this checklist. At sites where Long-Term Response Actions are in progress, O&M activities may be referred to as "system operations" since these sites are not considered to be in the O&M phase while being remediated under the Superfund program.

Five-Year Review Site Inspection Checklist (Template)

(Working document for site inspection. Information may be completed by hand and attached to the Five-Year Review report as supporting documentation of site status. "N/A" refers to "not applicable.")

I. SITE INFORMATION

Site name: Summit National	**Date of inspection:** 12/11/12
Location and Region: Deerfield, OH Region 5	**EPA ID:** OHD980609994
Agency, office, or company leading the five-year review: US EPA Region 5	**Weather/temperature:** Sunny / ~51°F

Remedy Includes: (Check all that apply)

- ✓ Landfill cover/containment
- ✓ Access controls
- ✓ Institutional controls
- ✓ Groundwater pump and treatment – GW. Pump and treat is in shutdown
- ✓ Surface water collection and treatment – During RA Construction, No surface water now
- Monitored natural attenuation
- ✓ Groundwater containment
- Vertical barrier walls
- Other _____

Attachments: Inspection team roster attached Site map attached

II. INTERVIEWS (Check all that apply)

1. **O&M site manager** Nicholas J. Schapman (Name) Site Manager (Title) _____ (Date)
   Interviewed (at site) at office by phone Phone no. 513-942-4750
   Problems, suggestions; Report attached Interview with Site manager is documented in this checklist.

2. **O&M staff** _____ (Name) _____ (Title) _____ (Date)
   Interviewed at site at office by phone Phone no. _____
   Problems, suggestions; Report attached _____

3. **Local regulatory authorities and response agencies** (i.e., State and Tribal offices, emergency response office, police department, office of public health or environmental health, zoning office, recorder of deeds, or other city and county offices, etc.) *Fill in all that apply.*

Agency OEPA
Contact Regan Williams — Project manager — 12/11/12 — 330-963-1210
Name / Title / Date / Phone no.
Problems; suggestions; Report attached attende Site inspection with EPA staff.

Agency _____
Contact _____ _____ _____ _____
Name / Title / Date / Phone no.
Problems; suggestions; Report attached _____

Agency _____
Contact _____ _____ _____ _____
Name / Title / Date / Phone no.
Problems; suggestions; Report attached _____

Agency _____
Contact _____ _____ _____ _____
Name / Title / Date / Phone no.
Problems; suggestions; Report attached _____

4. **Other interviews** (optional) Report attached.

III. ON-SITE DOCUMENTS & RECORDS VERIFIED (Check all that apply)

1. **O&M Documents**
   - O&M manual — Readily available — Up to date — N/A
   - As-built drawings — Readily available — Up to date — N/A
   - Maintenance logs — Readily available — Up to date — N/A

   Remarks

2. **Site-Specific Health and Safety Plan** — Readily available — Up to date — N/A
   - Contingency plan/emergency response plan — Readily available — Up to date — N/A

   Remarks

3. **O&M and OSHA Training Records** — Readily available — Up to date — N/A

   Remarks

4. **Permits and Service Agreements**
   - Air discharge permit — Readily available — Up to date — N/A
   - Effluent discharge — Readily available — Up to date — N/A
   - Waste disposal, POTW – Sludge — Readily available — Up to date — N/A
   - Other permits _____ — Readily available — Up to date — N/A

   Remarks

5. **Gas Generation Records** — Readily available — Up to date — (N/A)

   Remarks

6. **Settlement Monument Records** — Readily available — Up to date — (N/A)

   Remarks

7. **Groundwater Monitoring Records** — Readily available — Up to date — N/A

   Remarks annual report submitted

8. **Leachate Extraction Records** — Readily available — Up to date — N/A

   Remarks

9. **Discharge Compliance Records**
   - Air — Readily available — Up to date — N/A
   - Water (effluent) — Readily available — Up to date — N/A

   Remarks Not required any longer, since pump and treat system is shut down

10. **Daily Access/Security Logs** — Readily available — Up to date — N/A

    Remarks

IV. O&M COSTS

1. **O&M Organization**

State in-house — Contractor for State
✓ PRP in-house — Contractor for PRP
Federal Facility in-house — Contractor for Federal Facility
Other _____

2. **O&M Cost Records**

✓ Readily available ✓ Up to date
Funding mechanism/agreement in place
Original O&M cost estimate _____ Breakdown attached

Total annual cost by year for review period if available

From _____ Date	To 2008 Date	$129,997 Total cost	Breakdown attached
From _____ Date	To 2009 Date	$192,457 Total cost	Breakdown attached
From _____ Date	To 2010 Date	$83,372 Total cost	Breakdown attached
From _____ Date	To 2011 Date	$87,552 Total cost	Breakdown attached
From _____ Date	To 2012 Date	$127,818 Total cost	Breakdown attached

3. **Unanticipated or Unusually High O&M Costs During Review Period**

Describe costs and reasons: N/A

V. ACCESS AND INSTITUTIONAL CONTROLS ✓ Applicable N/A

A. Fencing

1. **Fencing damaged** ✓ Location shown on site map ✓ Gates secured N/A

Remarks _____

B. Other Access Restrictions

1. **Signs and other security measures** Location shown on site map ✓ N/A

Remarks _____

C. Institutional Controls (ICs)

1. **Implementation and enforcement**

Site conditions imply ICs not properly implemented — Yes ✓No N/A
Site conditions imply ICs not being fully enforced — Yes ✓No N/A

Type of monitoring (*e.g.*, self-reporting, drive by) _____
Frequency _____
Responsible party/agency _____
Contact _____ _____ _____ _____
Name Title Date Phone no.

Reporting is up-to-date — Yes No N/A
Reports are verified by the lead agency — Yes No N/A

Specific requirements in deed or decision documents have been met — Yes No N/A
Violations have been reported — Yes No N/A
Other problems or suggestions: Report attached

2. **Adequacy** ✓ICs are adequate ICs are inadequate N/A
Remarks an Environmental Covenant under UECA

D. General

1. **Vandalism/trespassing** Location shown on site map ✓No vandalism evident
Remarks

2. **Land use changes on site** ✓N/A
Remarks

3. **Land use changes off site** ✓N/A
Remarks

VI. GENERAL SITE CONDITIONS

A. Roads Applicable N/A

1. **Roads damaged** Location shown on site map ✓Roads adequate N/A
Remarks

B. Other Site Conditions

Remarks_____

_____

_____

_____

_____

_____

VII. LANDFILL COVERS Applicable ✓ N/A

A. Landfill Surface

1. **Settlement** (Low spots) Location shown on site map Settlement not evident
   Areal extent_____ Depth_____
   Remarks_____
   _____

2. **Cracks** Location shown on site map Cracking not evident
   Lengths_____ Widths_____ Depths_____
   Remarks_____
   _____

3. **Erosion** Location shown on site map Erosion not evident
   Areal extent_____ Depth_____
   Remarks_____
   _____

4. **Holes** Location shown on site map Holes not evident
   Areal extent_____ Depth_____
   Remarks_____
   _____

5. **Vegetative Cover** Grass Cover properly established No signs of stress
   Trees/Shrubs (indicate size and locations on a diagram)
   Remarks_____
   _____

6. **Alternative Cover (armored rock, concrete, etc.)** N/A
   Remarks_____
   _____

7. **Bulges** Location shown on site map Bulges not evident
   Areal extent_____ Height_____
   Remarks_____
   _____

8. **Wet Areas/Water Damage** Wet areas/water damage not evident
   - Wet areas — Location shown on site map — Areal extent_____
   - Ponding — Location shown on site map — Areal extent_____
   - Seeps — Location shown on site map — Areal extent_____
   - Soft subgrade — Location shown on site map — Areal extent_____

   Remarks_____

9. **Slope Instability** Slides — Location shown on site map — No evidence of slope instability
   Areal extent_____
   Remarks_____

B. Benches Applicable N/A

(Horizontally constructed mounds of earth placed across a steep landfill side slope to interrupt the slope in order to slow down the velocity of surface runoff and intercept and convey the runoff to a lined channel.)

1. **Flows Bypass Bench** Location shown on site map N/A or okay
   Remarks_____

2. **Bench Breached** Location shown on site map N/A or okay
   Remarks_____

3. **Bench Overtopped** Location shown on site map N/A or okay
   Remarks_____

C. Letdown Channels Applicable N/A

(Channel lined with erosion control mats, riprap, grout bags, or gabions that descend down the steep side slope of the cover and will allow the runoff water collected by the benches to move off of the landfill cover without creating erosion gullies.)

1. **Settlement** Location shown on site map No evidence of settlement
   Areal extent_____ Depth_____
   Remarks_____

2. **Material Degradation** Location shown on site map No evidence of degradation
   Material type_____ Areal extent_____
   Remarks_____

3. **Erosion** Location shown on site map No evidence of erosion
   Areal extent_____ Depth_____
   Remarks_____

4. **Undercutting** Location shown on site map No evidence of undercutting
Areal extent_____ Depth_____
Remarks_____

5. **Obstructions** Type_____ No obstructions
Location shown on site map Areal extent_____
Size_____
Remarks_____

6. **Excessive Vegetative Growth** Type_____
No evidence of excessive growth
Vegetation in channels does not obstruct flow
Location shown on site map Areal extent_____
Remarks_____

D. Cover Penetrations Applicable N/A

1. **Gas Vents** Active Passive
Properly secured/locked Functioning Routinely sampled Good condition
Evidence of leakage at penetration Needs Maintenance
N/A
Remarks_____

2. **Gas Monitoring Probes**
Properly secured/locked Functioning Routinely sampled Good condition
Evidence of leakage at penetration Needs Maintenance N/A
Remarks_____

3. **Monitoring Wells** (within surface area of landfill)
Properly secured/locked Functioning Routinely sampled Good condition
Evidence of leakage at penetration Needs Maintenance N/A
Remarks_____

4. **Leachate Extraction Wells**
Properly secured/locked Functioning Routinely sampled Good condition
Evidence of leakage at penetration Needs Maintenance N/A
Remarks_____

5. **Settlement Monuments** Located Routinely surveyed N/A
Remarks_____

E. Gas Collection and Treatment Applicable N/A

1. **Gas Treatment Facilities**
   Flaring Thermal destruction Collection for reuse
   Good condition Needs Maintenance
   Remarks_____

2. **Gas Collection Wells, Manifolds and Piping**
   Good condition Needs Maintenance
   Remarks_____

3. **Gas Monitoring Facilities** (*e.g.*, gas monitoring of adjacent homes or buildings)
   Good condition Needs Maintenance N/A
   Remarks_____

F. Cover Drainage Layer Applicable N/A

1. **Outlet Pipes Inspected** Functioning N/A
   Remarks_____

2. **Outlet Rock Inspected** Functioning N/A
   Remarks_____

G. Detention/Sedimentation Ponds Applicable N/A

1. **Siltation** Areal extent_____ Depth_____ N/A
   Siltation not evident
   Remarks_____

2. **Erosion** Areal extent_____ Depth_____
   Erosion not evident
   Remarks_____

3. **Outlet Works** Functioning N/A
   Remarks_____

4. **Dam** Functioning N/A
   Remarks_____

H. Retaining Walls Applicable N/A

1. **Deformations** Location shown on site map Deformation not evident
   Horizontal displacement_____ Vertical displacement_____
   Rotational displacement_____
   Remarks_____

2. **Degradation** Location shown on site map Degradation not evident
   Remarks_____

I. Perimeter Ditches/Off-Site Discharge Applicable N/A

1. **Siltation** Location shown on site map Siltation not evident
   Areal extent_____ Depth_____
   Remarks_____

2. **Vegetative Growth** Location shown on site map N/A
   Vegetation does not impede flow
   Areal extent_____ Type_____
   Remarks_____

3. **Erosion** Location shown on site map Erosion not evident
   Areal extent_____ Depth_____
   Remarks_____

4. **Discharge Structure** Functioning N/A
   Remarks_____

VIII. VERTICAL BARRIER WALLS Applicable ~~N/A~~

1. **Settlement** Location shown on site map Settlement not evident
   Areal extent_____ Depth_____
   Remarks_____

2. **Performance Monitoring** Type of monitoring_____
   Performance not monitored
   Frequency_____ Evidence of breaching
   Head differential_____
   Remarks_____

IX. GROUNDWATER/SURFACE WATER REMEDIES — ~~Applicable~~ N/A

A. Groundwater Extraction Wells, Pumps, and Pipelines — ~~Applicable~~ N/A

1. **~~Pumps,~~ Wellhead Plumbing, and Electrical**
   (Good condition) All required wells properly operating Needs Maintenance N/A
   Remarks Groundwater pump and treat system is shutdown

2. **Extraction System Pipelines, Valves, Valve Boxes, and Other Appurtenances**
   (Good condition) Needs Maintenance
   Remarks

3. **Spare Parts and Equipment**
   (Readily available) Good condition Requires upgrade Needs to be provided
   Remarks

B. Surface Water Collection Structures, Pumps, and Pipelines — Applicable ~~N/A~~

1. **Collection Structures, Pumps, and Electrical**
   Good condition Needs Maintenance
   Remarks

2. **Surface Water Collection System Pipelines, Valves, Valve Boxes, and Other Appurtenances**
   Good condition Needs Maintenance
   Remarks N/A

3. **Spare Parts and Equipment**
   Readily available Good condition Requires upgrade Needs to be provided
   Remarks N/A

C. Treatment System ~~Applicable~~ N/A

1. **Treatment Train** (Check components that apply)
   - Metals removal — Oil/water separation — Bioremediation
   - Air stripping — Carbon adsorbers
   - Filters_____
   - Additive (*e.g.*, chelation agent, flocculent)_____
   - Others_____
   - Good condition — Needs Maintenance
   - Sampling ports properly marked and functional
   - Sampling/maintenance log displayed and up to date
   - Equipment properly identified
   - Quantity of groundwater treated annually_____
   - Quantity of surface water treated annually_____

   Remarks Not in use

2. **Electrical Enclosures and Panels** (properly rated and functional)
   ~~N/A~~ — Good condition — Needs Maintenance

   Remarks_____

3. **Tanks, Vaults, Storage Vessels**
   ~~N/A~~ — Good condition — Proper secondary containment — Needs Maintenance

   Remarks_____

4. **Discharge Structure and Appurtenances**
   ~~N/A~~ — Good condition — Needs Maintenance

   Remarks_____

5. **Treatment Building(s)**
   N/A — Good condition (esp. roof and doorways) — Needs repair
   - Chemicals and equipment properly stored

   Remarks_____

6. **Monitoring Wells** (pump and treatment remedy)
   Properly secured/locked — Functioning — Routinely sampled — Good condition
   All required wells located — Needs Maintenance — N/A

   Remarks_____

D. Monitoring Data

1. Monitoring Data
   Is routinely submitted on time — Is of acceptable quality

2. Monitoring data suggests:
   Groundwater plume is effectively contained — Contaminant concentrations are declining

D. Monitored Natural Attenuation

1. **Monitoring Wells** (natural attenuation remedy)
   Properly secured/locked Functioning Routinely sampled Good condition
   All required wells located Needs Maintenance N/A
   Remarks

X. OTHER REMEDIES

If there are remedies applied at the site which are not covered above, attach an inspection sheet describing the physical nature and condition of any facility associated with the remedy. An example would be soil vapor extraction.

XI. OVERALL OBSERVATIONS

A. Implementation of the Remedy

Describe issues and observations relating to whether the remedy is effective and functioning as designed. Begin with a brief statement of what the remedy is to accomplish (i.e., to contain contaminant plume, minimize infiltration and gas emission, etc.).

N/A

B. Adequacy of O&M

Describe issues and observations related to the implementation and scope of O&M procedures. In particular, discuss their relationship to the current and long-term protectiveness of the remedy.

N/A

C. Early Indicators of Potential Remedy Problems

Describe issues and observations such as unexpected changes in the cost or scope of O&M or a high frequency of unscheduled repairs, that suggest that the protectiveness of the remedy may be compromised in the future.

N/A

D. Opportunities for Optimization

Describe possible opportunities for optimization in monitoring tasks or the operation of the remedy.

N/A

Attachment 5

Photographs Documenting Site Conditions


FOR FURTHER
INFORMATION CONTACT:
US EPA: 1-800-621-8431
OHIO EPA: (216)963-1200
SITE PHONE: 947-0335

Attachment 6

Newspaper Ad

Apple paid 2 percent tax on foreign profits

ASSOCIATED PRESS

Apple Inc. is paying a rate of only 1.9 percent income tax on its earnings outside the U.S.

The world's most valuable company paid $713 million in tax on foreign earnings of $36.8 billion in the fiscal year that ended Sept. 29, according to a regulatory filing. Foreign earnings rose 53 percent from fiscal 2011, when the iPhone and iPad maker paid 2.5 percent income tax. The tech giant's foreign tax rate compares with the general U.S. corporate tax rate of 35 percent.

Apple may pay some income taxes on its profit to the country in which it sells its products, but it minimizes them by using various accounting moves to shift profits to countries with low tax rates. Other multinational corporations also use such tax techniques, which are legal.

Red Cross reaches wounded in Syrian city

GENEVA — The International Committee of the Red Cross has delivered aid to hundreds of civilians trapped for months in the Syrian city of Homs.

The aid group says it reached the neighborhoods of Khalidiya and Hamidiya in the old city of Homs on Saturday after negotiations with the government and rebels.

It said in a statement late Sunday that 34 foreign delegates and Syrian Arab Red Crescent officials were able to deliver medical aid to 100 wounded people.

Homs has witnessed some of Syria's worst fighting since a popular uprising began in the country in March 2011.

USS Enterprise takes final voyage

ASSOCIATED PRESS

NORFOLK, Va. — The world's first nuclear-powered aircraft carrier is shutting down its reactors as its 50-year career comes to a close.

The USS Enterprise finished its 25th and final deployment on Sunday when it returned to its home port in Norfolk, Va.

Thousands of veterans are expected to attend its deactivation ceremony on Dec. 1.

EPA Begins Review of Summit National Superfund Site
Deerfield, Ohio

The U.S. Environmental Protection Agency is conducting a five-year review of the Summit National Superfund site, 1240 Alliance Road, Deerfield. The Superfund law requires regular checkups of sites that have been cleaned up – with waste managed on-site – to make sure the cleanup continues to protect people and the environment. This is the third review of the site.

EPA's cleanup included excavation and on-site incineration of contaminated soil, sediment and the contents of several hundred buried drums; on-site treatment of contaminated ground water; extraction and treatment of on-site surface water; fencing; and clean soil and vegetative cover over the site.

More information is available at the Reed Memorial Library, 167 E. Main St., Ravenna, and at www.epa.gov/region5/cleanup/summitnational. The review should be completed by May 2013.

The five-year-review is an opportunity for you to tell EPA about site conditions and any concerns you have. Contact:

Susan Pastor
Community Involvement Coordinator
312-353-1325
pastor.susan@epa.gov

Pablo Valentin
Remedial Project Manager
312-353-2886
valentin.pablo@epa.gov

You may also call EPA toll-free at 800-621-8431, 9:30 a.m. to 5:30 p.m., weekdays.

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Paid Political Advertisement

Supports candidates who preserve values

As Catholics, we ask our Catholic church leaders and clergy of all faiths to further provide a moral compass to the electorate before election day. These spiritual leaders should forcefully speak out as Rev. Billy Graham wrote in the Oct. 21 issue of the Cleveland Plain Dealer, a full page ad, concerning this election.

He said that "it is vitally important that we cast our ballots for candidates who protect the sanctity of life and support the biblical definition of marriage as between a man and a woman." He concluded that "we should pray that America remain a nation under God."

Lastly, we should vote for candidates who will continue to support all aspects of "freedom of religion" which has been placed in serious jeopardy by virtue of the Federal Department of Health and Human Services mandating all insurance policies cover contraception, sterilization and abortion inducing drugs. This mandate covers all employers, including Catholic institutions.

The time is late. We need to step forward and vote for candidates who will preserve the cultural values upon which this nation was founded.

The November election is the most critical election in our lifetime. If the country elects candidates who do not uphold these values, the nation will continue on a path from capitalism and freedom and become like most of Western Europe's economic, secular and socialistic systems.

Anthony F. Rosa and John T. Billick,
Hudson, Ohio

Paid Political Advertisement

Pd. Pol. Adv.

NICK SKERIOTIS
For State Representative
75th District
www.NickForOhio.com
Paid for by Nick Skeriotis for State Representative, Treasurer John Skeriotis
967 Tershell Tr., Mogadore, OH 44260

A Celebration of Lights

2012 Light a Light for a Loved One

Sponsored by the Auxiliary of Robinson Memorial Hospital

You are invited to join in the Celebration of Lights ceremony where hundreds of lights will illuminate the trees at Robinson Memorial Hospital. All contributions will be utilized by the Auxiliary to fulfill future commitments to Robinson Memorial Hospital. Contribution levels range from $5 to $200+ (see below).

December 5, 2012 • 7 PM
at The Main Entrance Of The Hospital, With A Reception Following.

Names of those honored through donations will be displayed throughout the holiday season in the main hospital entrance. Donations will be accepted anytime, but to assure proper recognition, please submit donations by November 13, 2012.

Please print clearly

( ) $5 each Light on outside trees ( ) $50 each Angel Tree of Angels ( ) $100 each Silver Tree Walk of Trees ( ) $200+ each Gold Tree Walk of Trees

In honor of: _____

$5 each name: _____

$50 each name: _____

$100 each name: _____

$200 each name: _____

$ _____ Total Amount Enclosed

Make checks payable to: Celebration of Lights, Auxiliary of RMH
6847 N. Chestnut St. • PO Box 1204 Ravenna, OH 44266

From: Name _____

Address _____

City _____ State _____ Zip _____ Phone _____

Do you wish to have your gift acknowledged? YES NO
If Yes, note name and address of person(s) you wish to receive acknowledgment.

_____

_____

VOTE

Portage County Health Dept.

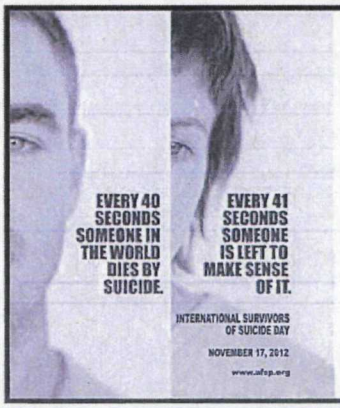
YES on ISSUE 43

Portage County Health Department:
"Public Health Working for You"

0.4 mil REPLACEMENT Levy from 1955

Pol. Adv.

Paid for by the Portage County Health Levy Committee
Debbie Stall, Treasurer 2979 State Route 44, Rootstown, OH



American Foundation for Suicide Prevention's

14th Annual National Survivors of Suicide Day

Saturday, November 17, 2012

Thousands of survivors of suicide loss will gather on this day of healing, support and empowerment. If you have lost someone in your life to suicide, please join us. Local conference sites will simultaneously watch a 90-minute broadcast produced by the American Foundation for Suicide Prevention. On this broadcast, a diverse panel of survivors and mental health professionals will address the questions that so many survivors face, "Why did this happen? How can I cope? Where can I find support?"

Local Site: Coleman Access, Sue Hetrick Building, 3922 Lovers Lane, Ravenna, 12:45 pm-3:00 pm
Admission: No cost, parking free
For information or to pre-register, call 330-673-1756, ext. 203, or email joelm@mental-health-recovery.org.
Walk-ins are welcome, but pre-registering will help with planning. Details at www.mental-health-recovery.org/teaser.

SPONSORS

COLEMAN Access Services

Mental Health & Recovery Board of Portage County

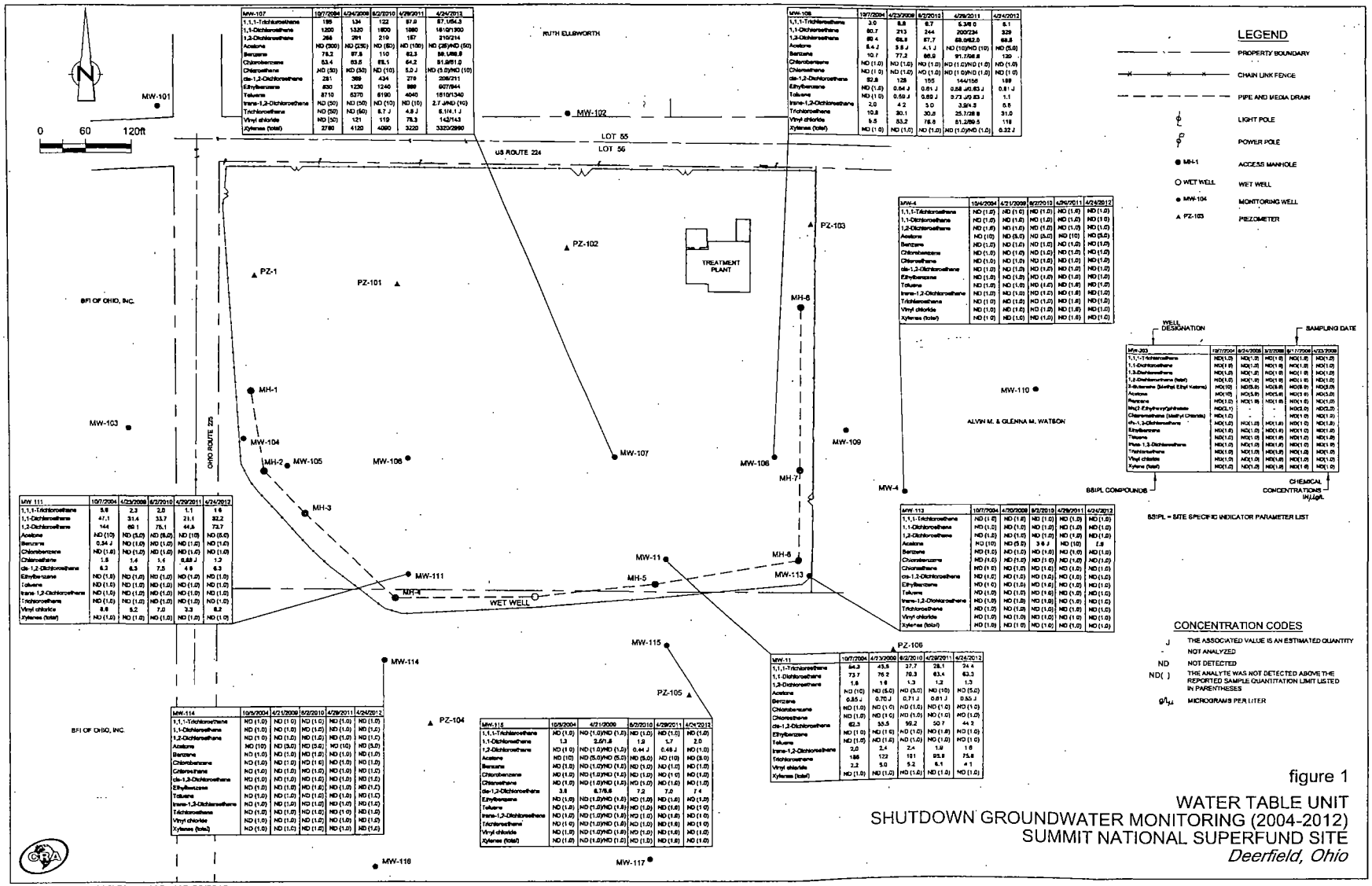
Portage County Suicide Prevention Coalition

Follow the Mental Health & Recovery Board on facebook

The Mental Health & Recovery Board provides equal service and employment opportunities. Contact us at 330-673-1756.

Attachment 7

Shutdown Groundwater Monitoring Figures (2004-2012) in the Water Table Unit and Upper Intermediate Unit



MW-107	10/7/2004	4/24/2008	8/2/2010	4/29/2011	4/24/2012
1,1,1-Trichloroethane	195	134	122	97.9	87.1/84.3
1,1-Dichloroethane	1200	1320	1800	1660	1610/1300
1,2-Dichloroethane	264	291	219	187	210/214
Acetone	ND (500)	ND (250)	ND (50)	ND (100)	ND (25)/ND (50)
Benzene	78.2	97.5	110	82.3	88.1/88.8
Chlorobenzene	53.4	63.5	83.1	64.2	51.0/51.0
Chloroethane	ND (50)	ND (50)	ND (10)	5.0 J	ND (5.0)/ND (10)
cis-1,2-Dichloroethene	281	369	434	279	208/211
Ethylbenzene	830	1230	1240	899	907/844
Toluene	8710	5370	6190	4640	1810/1340
trans-1,2-Dichloroethene	ND (50)	ND (50)	ND (10)	ND (10)	2.7 J/ND (10)
Trichloroethene	ND (50)	ND (50)	8.7 J	4.8 J	6.1/4.1 J
Vinyl chloride	ND (50)	121	119	78.3	142/143
Xylenes (total)	2780	4120	4080	3220	3320/2890

MW-108	10/7/2004	4/23/2008	8/2/2010	4/29/2011	4/24/2012
1,1,1-Trichloroethane	3.0	8.8	6.7	5.3/6.0	6.1
1,1-Dichloroethane	80.7	213	244	200/234	329
1,2-Dichloroethane	69.4	69.8	67.7	69.9/63.0	69.8
Acetone	6.4 J	9.8 J	4.1 J	ND (10)/ND (10)	ND (5.0)
Benzene	10.7	77.2	66.9	91.7/66.8	120
Chlorobenzene	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)/ND (1.0)	ND (1.0)
Chloroethane	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)/ND (1.0)	ND (1.0)
cis-1,2-Dichloroethene	92.8	128	155	144/156	169
Ethylbenzene	ND (1.0)	0.64 J	0.81 J	0.58 J/0.63 J	0.81 J
Toluene	ND (1.0)	0.59 J	0.89 J	0.73 J/0.83 J	1.1
trans-1,2-Dichloroethene	2.0	4.2	3.0	3.8/4.0	5.0
Trichloroethene	10.8	30.1	30.8	25.7/28.9	31.0
Vinyl chloride	9.5	53.2	76.8	61.2/69.5	118
Xylenes (total)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)/ND (1.0)	0.32 J

MW-4	10/4/2004	4/21/2008	8/2/2010	4/26/2011	4/24/2012
1,1,1-Trichloroethane	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
1,1-Dichloroethane	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
1,2-Dichloroethane	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Acetone	ND (5.0)	ND (5.0)	ND (5.0)	ND (10)	ND (5.0)
Benzene	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Chlorobenzene	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Chloroethane	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
cis-1,2-Dichloroethene	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Ethylbenzene	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Toluene	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
trans-1,2-Dichloroethene	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Trichloroethene	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Vinyl chloride	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Xylenes (total)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)

MW-J03	10/7/2004	8/24/2008	8/2/2010	8/17/2009	4/23/2008
1,1,1-Trichloroethane	MD(1.0)	MD(1.0)	MD(1.0)	MD(1.0)	MD(1.0)
1,1-Dichloroethane	MD(1.0)	MD(1.0)	MD(1.0)	MD(1.0)	MD(1.0)
1,2-Dichloroethane	MD(1.0)	MD(1.0)	MD(1.0)	MD(1.0)	MD(1.0)
1,4-Dichlorobenzene (total)	MD(1.0)	MD(1.0)	MD(1.0)	MD(1.0)	MD(1.0)
2-Butanone (Methyl Ethyl Ketone)	MD(10)	MD(5.0)	MD(5.0)	MD(5.0)	MD(5.0)
Acetone	MD(10)	MD(5.0)	MD(5.0)	MD(10)	MD(5.0)
Benzene	MD(1.0)	MD(1.0)	MD(1.0)	MD(1.0)	MD(1.0)
bis(2-Ethylhexyl)phthalate	MD(2.1)	-	-	MD(2.0)	MD(2.2)
Chloromethane (Methyl Chloride)	MD(1.0)	-	-	MD(1.0)	MD(1.3)
cis-1,3-Dichloropropene	MD(1.0)	MD(1.0)	MD(1.0)	MD(1.0)	MD(1.0)
Ethylbenzene	MD(1.0)	MD(1.0)	MD(1.0)	MD(1.0)	MD(1.0)
Toluene	MD(1.0)	MD(1.0)	MD(1.0)	MD(1.0)	MD(1.0)
trans-1,3-Dichloropropene	MD(1.0)	MD(1.0)	MD(1.0)	MD(1.0)	MD(1.0)
Trichloroethene	MD(1.0)	MD(1.0)	MD(1.0)	MD(1.0)	MD(1.0)
Vinyl chloride	MD(1.0)	MD(1.0)	MD(1.0)	MD(1.0)	MD(1.0)
Xylene (total)	MD(1.0)	MD(1.0)	MD(1.0)	MD(1.0)	MD(1.0)

MW-111	10/7/2004	4/23/2008	8/2/2010	4/29/2011	4/24/2012
1,1,1-Trichloroethane	5.8	2.3	2.0	1.1	1.8
1,1-Dichloroethane	47.1	31.4	33.7	21.1	32.2
1,2-Dichloroethane	144	88.1	78.1	44.8	73.7
Acetone	ND (10)	ND (5.0)	ND (5.0)	ND (10)	ND (5.0)
Benzene	0.34 J	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Chlorobenzene	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Chloroethane	1.5	1.4	1.4	0.88 J	1.2
cis-1,2-Dichloroethene	6.3	6.5	7.5	4.9	6.3
Ethylbenzene	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Toluene	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
trans-1,2-Dichloroethene	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Trichloroethene	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Vinyl chloride	8.6	8.2	7.0	3.3	8.2
Xylenes (total)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)

MW-113	10/7/2004	4/30/2008	8/2/2010	4/29/2011	4/24/2012
1,1,1-Trichloroethane	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
1,1-Dichloroethane	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
1,2-Dichloroethane	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Acetone	ND (10)	ND (5.0)	ND (5.0)	ND (10)	2.8
Benzene	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Chlorobenzene	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Chloroethane	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
cis-1,2-Dichloroethene	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Ethylbenzene	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Toluene	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
trans-1,2-Dichloroethene	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Trichloroethene	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Vinyl chloride	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Xylenes (total)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)

MW-11	10/7/2004	4/23/2008	8/2/2010	4/29/2011	4/24/2012
1,1,1-Trichloroethane	84.2	45.5	27.7	28.1	24.4
1,1-Dichloroethane	73.7	76.2	70.3	63.4	63.3
1,2-Dichloroethane	1.6	1.6	1.3	1.2	1.3
Acetone	ND (10)	ND (5.0)	ND (5.0)	ND (10)	ND (5.0)
Benzene	0.85 J	0.70 J	0.71 J	0.61 J	0.55 J
Chlorobenzene	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Chloroethane	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
cis-1,2-Dichloroethene	62.3	53.5	50.2	50.7	44.9
Ethylbenzene	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Toluene	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
trans-1,2-Dichloroethene	2.0	2.4	2.4	1.9	1.8
Trichloroethene	186	122	101	93.9	75.9
Vinyl chloride	2.2	5.0	5.2	6.1	4.1
Xylenes (total)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)

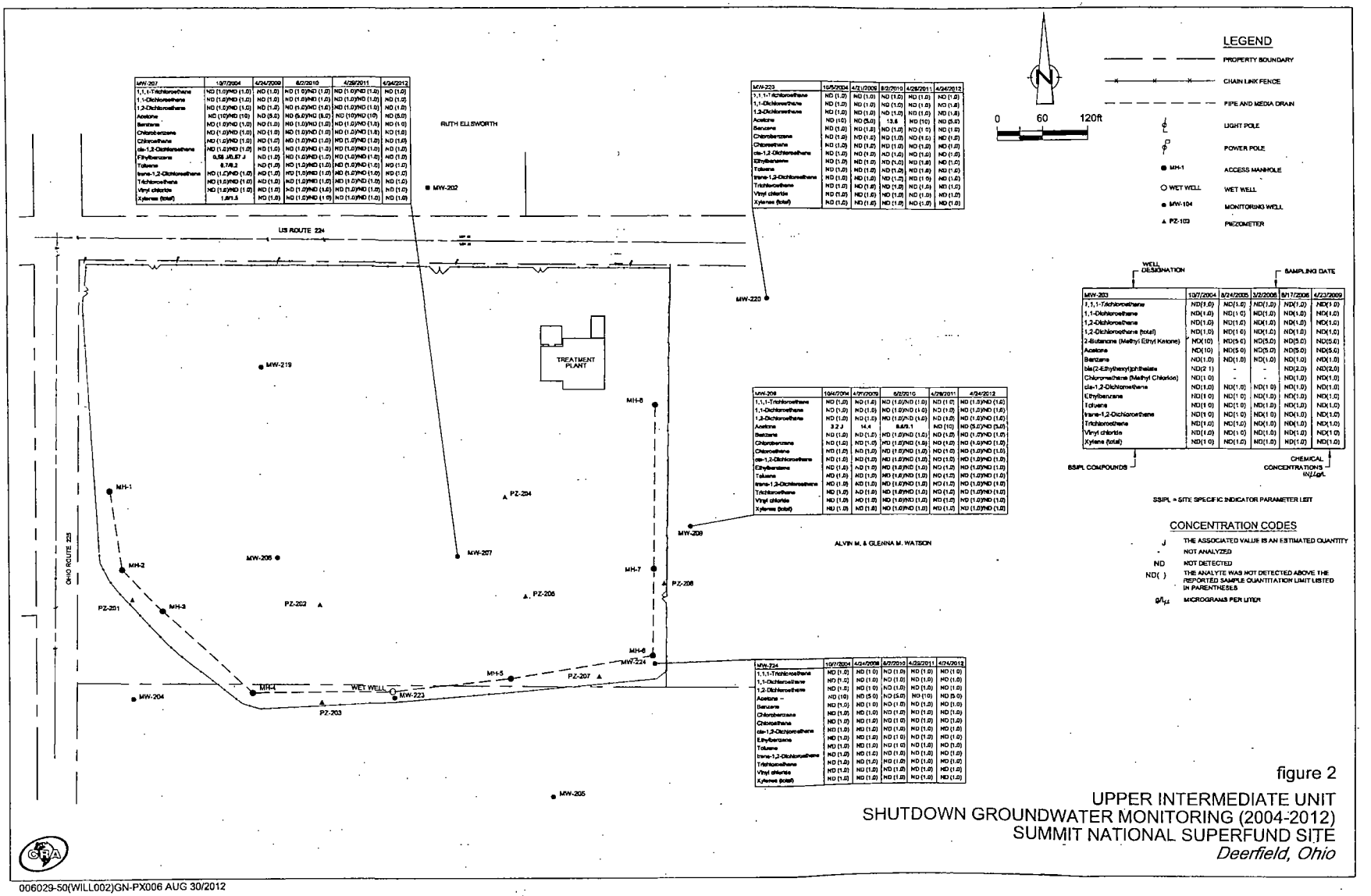
MW-114	10/5/2004	4/21/2008	8/2/2010	4/29/2011	4/24/2012
1,1,1-Trichloroethane	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
1,1-Dichloroethane	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
1,2-Dichloroethane	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Acetone	ND (10)	ND (5.0)	ND (5.0)	ND (10)	ND (5.0)
Benzene	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Chlorobenzene	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Chloroethane	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
cis-1,2-Dichloroethene	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Ethylbenzene	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Toluene	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
trans-1,2-Dichloroethene	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Trichloroethene	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Vinyl chloride	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Xylenes (total)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)

MW-115	10/5/2004	4/21/2008	8/2/2010	4/29/2011	4/24/2012
1,1,1-Trichloroethane	ND (1.0)	ND (1.0)/ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
1,1-Dichloroethane	1.3	2.5/1.8	1.9	1.7	2.0
1,2-Dichloroethane	ND (1.0)	ND (1.0)/ND (1.0)	0.44 J	0.48 J	ND (1.0)
Acetone	ND (10)	ND (5.0)/ND (5.0)	ND (5.0)	ND (10)	ND (5.0)
Benzene	ND (1.0)	ND (1.0)/ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Chlorobenzene	ND (1.0)	ND (1.0)/ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Chloroethane	ND (1.0)	ND (1.0)/ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
cis-1,2-Dichloroethene	3.8	6.7/5.6	7.2	7.0	7.4
Ethylbenzene	ND (1.0)	ND (1.0)/ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Toluene	ND (1.0)	ND (1.0)/ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
trans-1,2-Dichloroethene	ND (1.0)	ND (1.0)/ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Trichloroethene	ND (1.0)	ND (1.0)/ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Vinyl chloride	ND (1.0)	ND (1.0)/ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Xylenes (total)	ND (1.0)	ND (1.0)/ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)

figure 1

WATER TABLE UNIT
SHUTDOWN GROUNDWATER MONITORING (2004-2012)
SUMMIT NATIONAL SUPERFUND SITE
Deerfield, Ohio

006029-50(WILL002)GN-PX005 AUG 30/2012



MW-207	10/7/2004	4/24/2006	8/2/2010	4/26/2011	4/24/2012
1,1,1-Trichloroethane	ND (1.0)/ND (1.0)	ND (1.0)	ND (1.0)/ND (1.0)	ND (1.0)/ND (1.0)	ND (1.0)
1,1-Dichloroethane	ND (1.0)/ND (1.0)	ND (1.0)	ND (1.0)/ND (1.0)	ND (1.0)/ND (1.0)	ND (1.0)
1,2-Dichloroethane	ND (1.0)/ND (1.0)	ND (1.0)	ND (1.0)/ND (1.0)	ND (1.0)/ND (1.0)	ND (1.0)
Acetone	ND (10)/ND (10)	ND (5.0)	ND (5.0)/ND (5.0)	ND (10)/ND (10)	ND (5.0)
Benzene	ND (1.0)/ND (1.0)	ND (1.0)	ND (1.0)/ND (1.0)	ND (1.0)/ND (1.0)	ND (1.0)
Chlorobenzene	ND (1.0)/ND (1.0)	ND (1.0)	ND (1.0)/ND (1.0)	ND (1.0)/ND (1.0)	ND (1.0)
Chloroethane	ND (1.0)/ND (1.0)	ND (1.0)	ND (1.0)/ND (1.0)	ND (1.0)/ND (1.0)	ND (1.0)
cis-1,2-Dichloroethene	ND (1.0)/ND (1.0)	ND (1.0)	ND (1.0)/ND (1.0)	ND (1.0)/ND (1.0)	ND (1.0)
Ethylbenzene	0.58 J/0.67 J	ND (1.0)	ND (1.0)/ND (1.0)	ND (1.0)/ND (1.0)	ND (1.0)
Toluene	0.7/0.2	ND (1.0)	ND (1.0)/ND (1.0)	ND (1.0)/ND (1.0)	ND (1.0)
trans-1,2-Dichloroethene	ND (1.0)/ND (1.0)	ND (1.0)	ND (1.0)/ND (1.0)	ND (1.0)/ND (1.0)	ND (1.0)
Trichloroethene	ND (1.0)/ND (1.0)	ND (1.0)	ND (1.0)/ND (1.0)	ND (1.0)/ND (1.0)	ND (1.0)
Vinyl chloride	ND (1.0)/ND (1.0)	ND (1.0)	ND (1.0)/ND (1.0)	ND (1.0)/ND (1.0)	ND (1.0)
Xylenes (total)	1.6/1.3	ND (1.0)	ND (1.0)/ND (1.0)	ND (1.0)/ND (1.0)	ND (1.0)

MW-223	10/5/2004	4/21/2006	8/2/2010	4/26/2011	4/24/2012
1,1,1-Trichloroethane	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
1,1-Dichloroethane	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
1,2-Dichloroethane	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Acetone	ND (10)	ND (5.0)	13.6	ND (10)	ND (5.0)
Benzene	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Chlorobenzene	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Chloroethane	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
cis-1,2-Dichloroethene	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Ethylbenzene	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Toluene	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
trans-1,2-Dichloroethene	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Trichloroethene	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Vinyl chloride	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Xylenes (total)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)

MW-208	10/4/2004	4/7/2006	8/2/2010	4/26/2011	4/24/2012
1,1,1-Trichloroethane	ND (1.0)	ND (1.0)	ND (1.0)/ND (1.0)	ND (1.0)	ND (1.0)/ND (1.0)
1,1-Dichloroethane	ND (1.0)	ND (1.0)	ND (1.0)/ND (1.0)	ND (1.0)	ND (1.0)/ND (1.0)
1,2-Dichloroethane	ND (1.0)	ND (1.0)	ND (1.0)/ND (1.0)	ND (1.0)	ND (1.0)/ND (1.0)
Acetone	3.2 J	14.4	8.6/9.1	ND (10)	ND (5.0)/ND (5.0)
Benzene	ND (1.0)	ND (1.0)	ND (1.0)/ND (1.0)	ND (1.0)	ND (1.0)/ND (1.0)
Chlorobenzene	ND (1.0)	ND (1.0)	ND (1.0)/ND (1.0)	ND (1.0)	ND (1.0)/ND (1.0)
Chloroethane	ND (1.0)	ND (1.0)	ND (1.0)/ND (1.0)	ND (1.0)	ND (1.0)/ND (1.0)
cis-1,2-Dichloroethene	ND (1.0)	ND (1.0)	ND (1.0)/ND (1.0)	ND (1.0)	ND (1.0)/ND (1.0)
Ethylbenzene	ND (1.0)	ND (1.0)	ND (1.0)/ND (1.0)	ND (1.0)	ND (1.0)/ND (1.0)
Toluene	ND (1.0)	ND (1.0)	ND (1.0)/ND (1.0)	ND (1.0)	ND (1.0)/ND (1.0)
trans-1,2-Dichloroethene	ND (1.0)	ND (1.0)	ND (1.0)/ND (1.0)	ND (1.0)	ND (1.0)/ND (1.0)
Trichloroethene	ND (1.0)	ND (1.0)	ND (1.0)/ND (1.0)	ND (1.0)	ND (1.0)/ND (1.0)
Vinyl chloride	ND (1.0)	ND (1.0)	ND (1.0)/ND (1.0)	ND (1.0)	ND (1.0)/ND (1.0)
Xylenes (total)	ND (1.0)	ND (1.0)	ND (1.0)/ND (1.0)	ND (1.0)	ND (1.0)/ND (1.0)

MW-224	10/7/2004	4/24/2006	8/2/2010	4/26/2011	4/24/2012
1,1,1-Trichloroethane	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
1,1-Dichloroethane	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
1,2-Dichloroethane	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Acetone	ND (10)	ND (5.0)	ND (5.0)	ND (10)	ND (5.0)
Benzene	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Chlorobenzene	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Chloroethane	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
cis-1,2-Dichloroethene	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Ethylbenzene	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Toluene	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
trans-1,2-Dichloroethene	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Trichloroethene	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Vinyl chloride	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Xylenes (total)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)

MW-203	10/7/2004	8/24/2005	3/3/2006	8/17/2006	4/23/2009
1,1,1-Trichloroethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,1-Dichloroethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,2-Dichloroethane	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
1,2-Dichloroethene (total)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
2-Butanone (Methyl Ethyl Ketone)	ND(10)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Acetone	ND(10)	ND(5.0)	ND(5.0)	ND(5.0)	ND(5.0)
Benzene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
bis(2-Ethylhexyl)phthalate	ND(2.1)	-	-	ND(2.0)	ND(2.0)
Chloromethane (Methyl Chloride)	ND(1.0)	-	-	ND(1.0)	ND(1.0)
cis-1,2-Dichloroethene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Ethylbenzene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Toluene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
trans-1,2-Dichloroethene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Trichloroethene	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Vinyl chloride	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)
Xylene (total)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)	ND(1.0)

figure 2

UPPER INTERMEDIATE UNIT
SHUTDOWN GROUNDWATER MONITORING (2004-2012)
SUMMIT NATIONAL SUPERFUND SITE
Deerfield, Ohio

006029-50(WILL002)GN-PX006 AUG 30/2012

Attachment 8

Figures of Site Groundwater Contours from April 2012 Hydraulic Monitoring

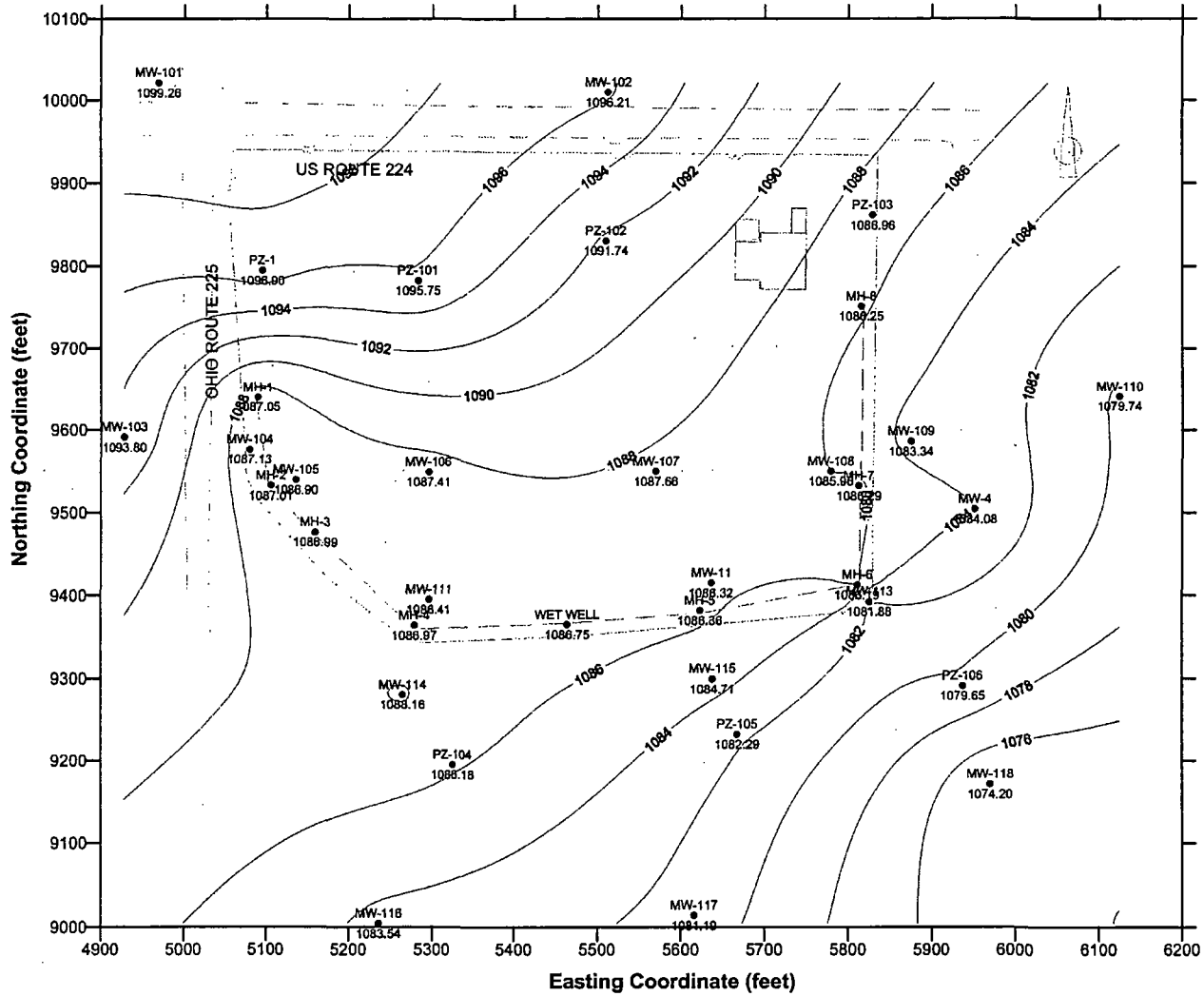


figure E.1
GROUNDWATER CONTOURS
WATER TABLE UNIT -- APRIL 24, 2012
SUMMIT NATIONAL SUPERFUND SITE
Deerfield, Ohio

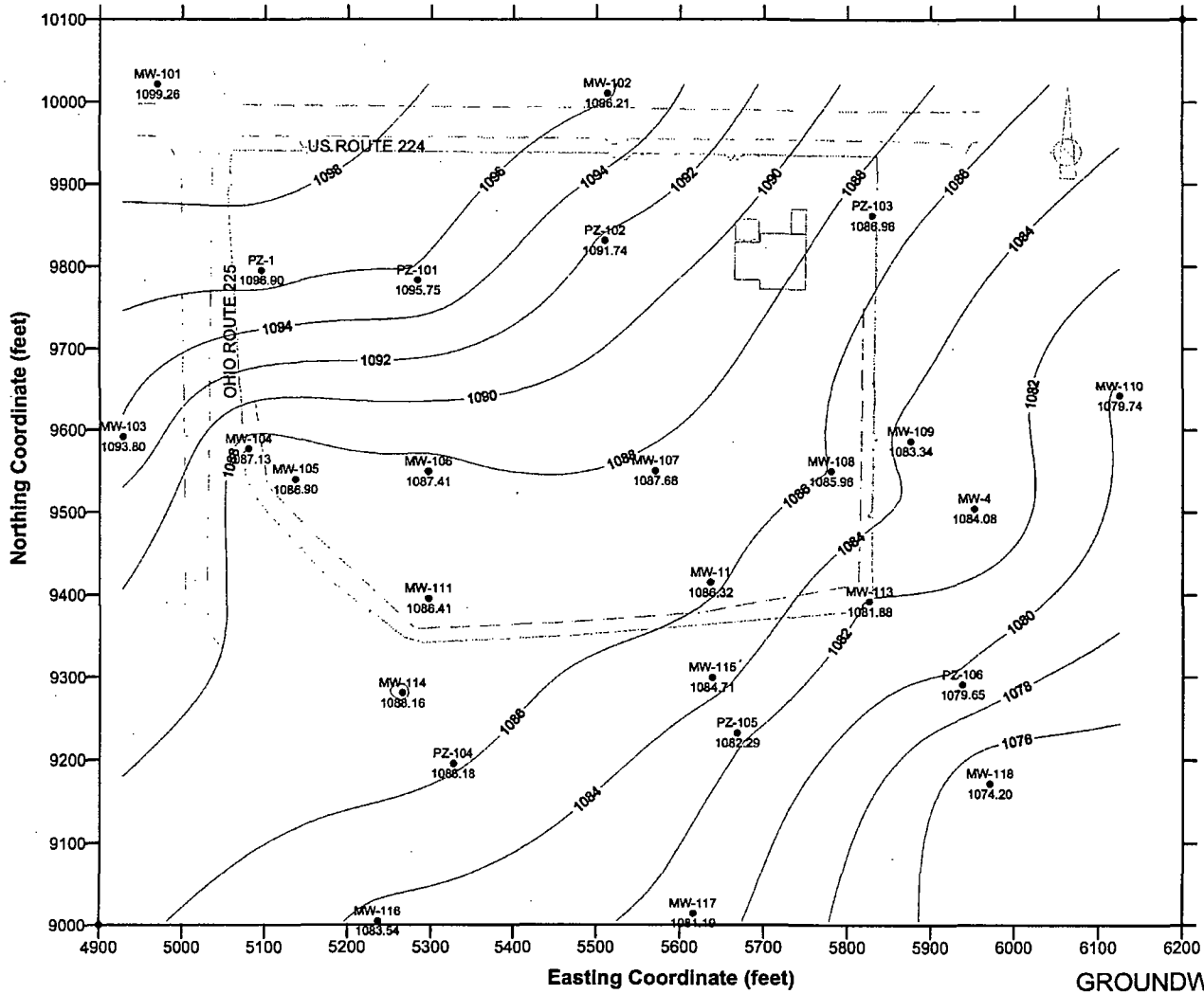


figure E.2
GROUNDWATER CONTOURS
WATER TABLE UNIT (w/o MANHOLES) – APRIL 24, 2012
SUMMIT NATIONAL SUPERFUND SITE
Deerfield, Ohio

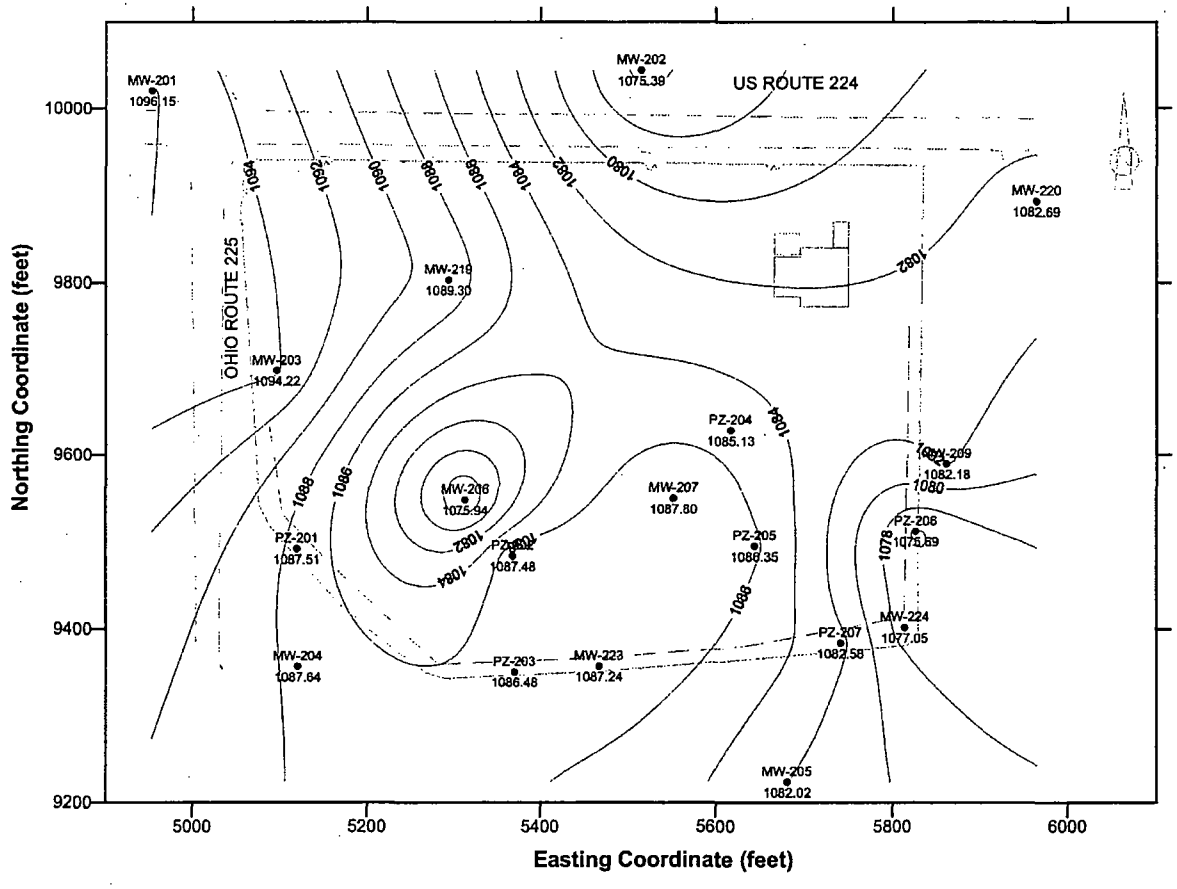


figure E.3
GROUNDWATER CONTOURS
UPPER INTERMEDIATE UNIT – APRIL 24, 2012
SUMMIT NATIONAL SUPERFUND SITE
Deerfield, Ohio

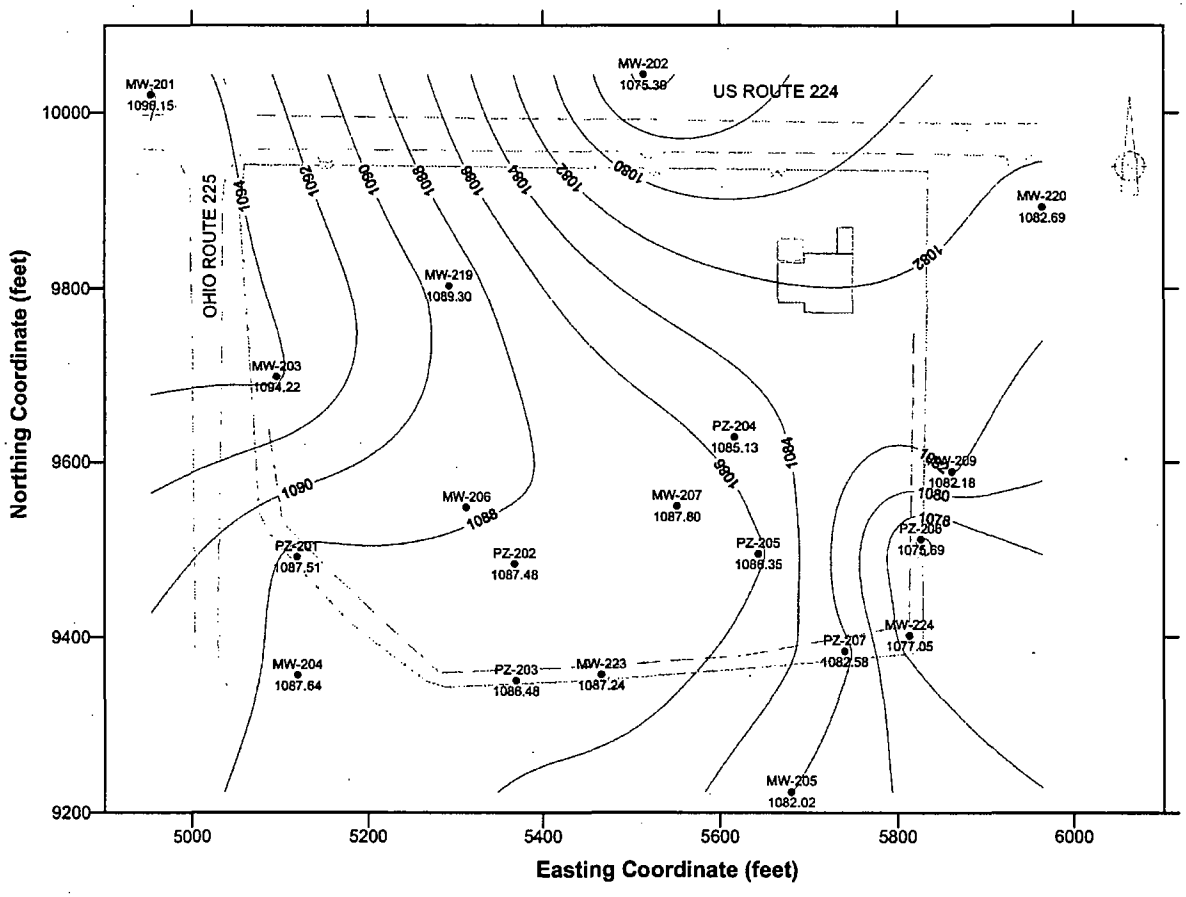


figure E.4
GROUNDWATER CONTOURS
UPPER INTERMEDIATE UNIT (w/o MW-206) -- APRIL 24, 2012
SUMMIT NATIONAL SUPERFUND SITE
Deerfield, Ohio

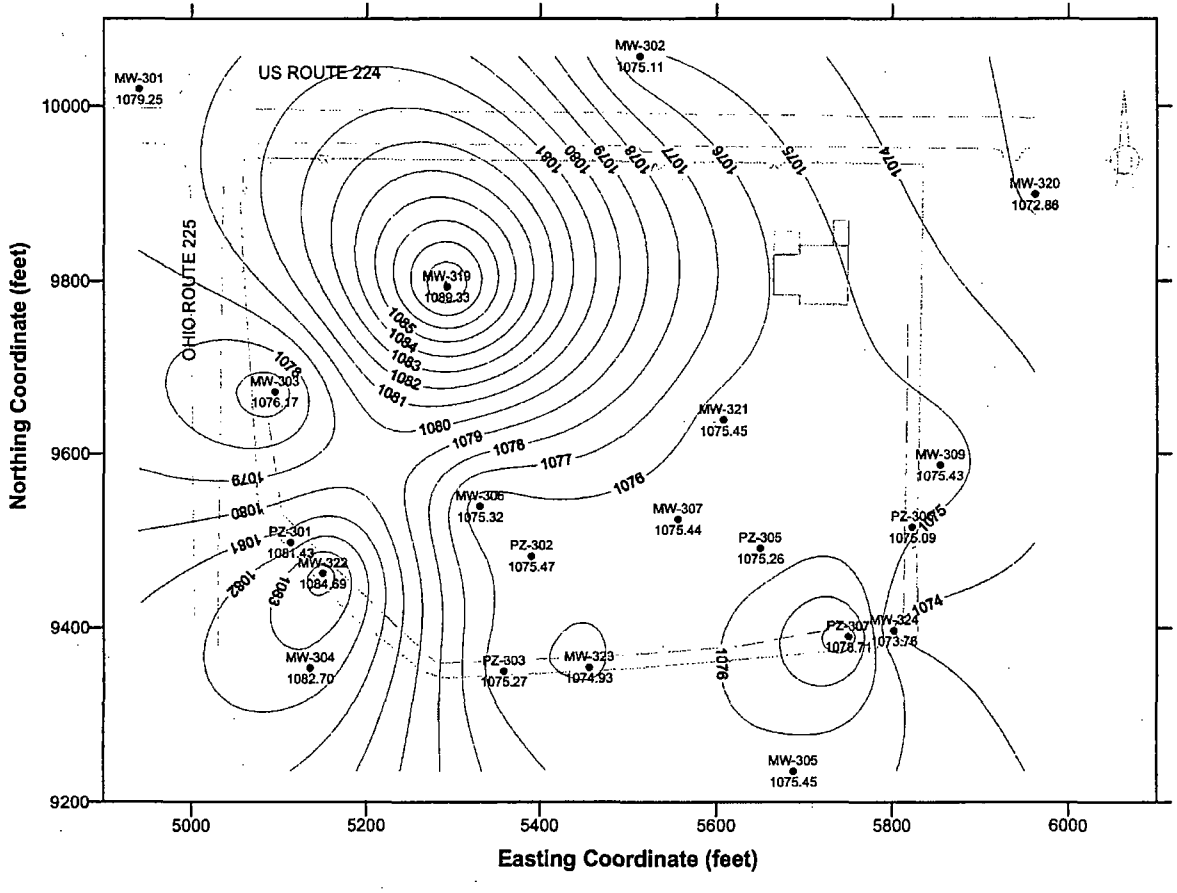


figure E.5
GROUNDWATER CONTOURS
LOWER INTERMEDIATE UNIT – APRIL 24, 20112
SUMMIT NATIONAL SUPERFUND SITE
Deerfield, Ohio

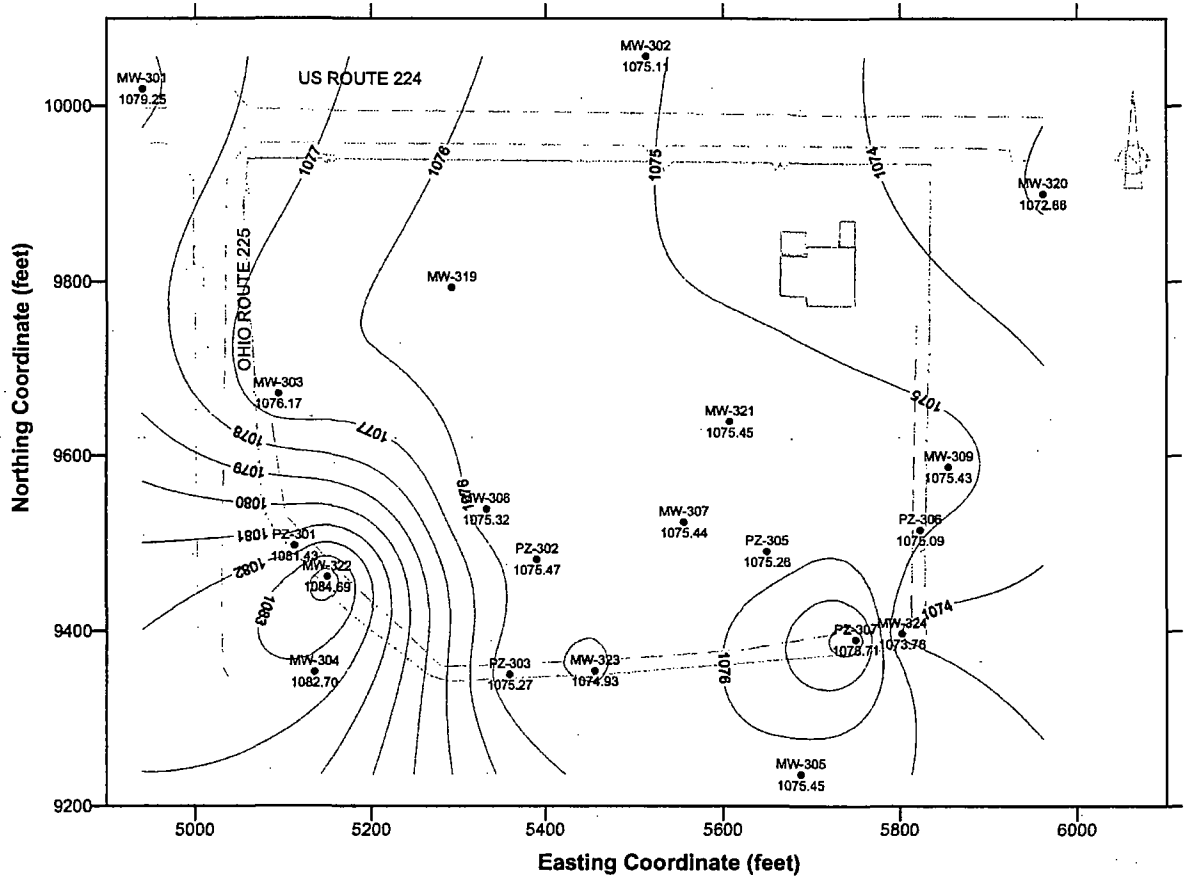


figure E.6
GROUNDWATER CONTOURS
LOWER INTERMEDIATE UNIT - (w/o MW-319) -- APRIL 24, 2012
SUMMIT NATIONAL SUPERFUND SITE
Deerfield, Ohio

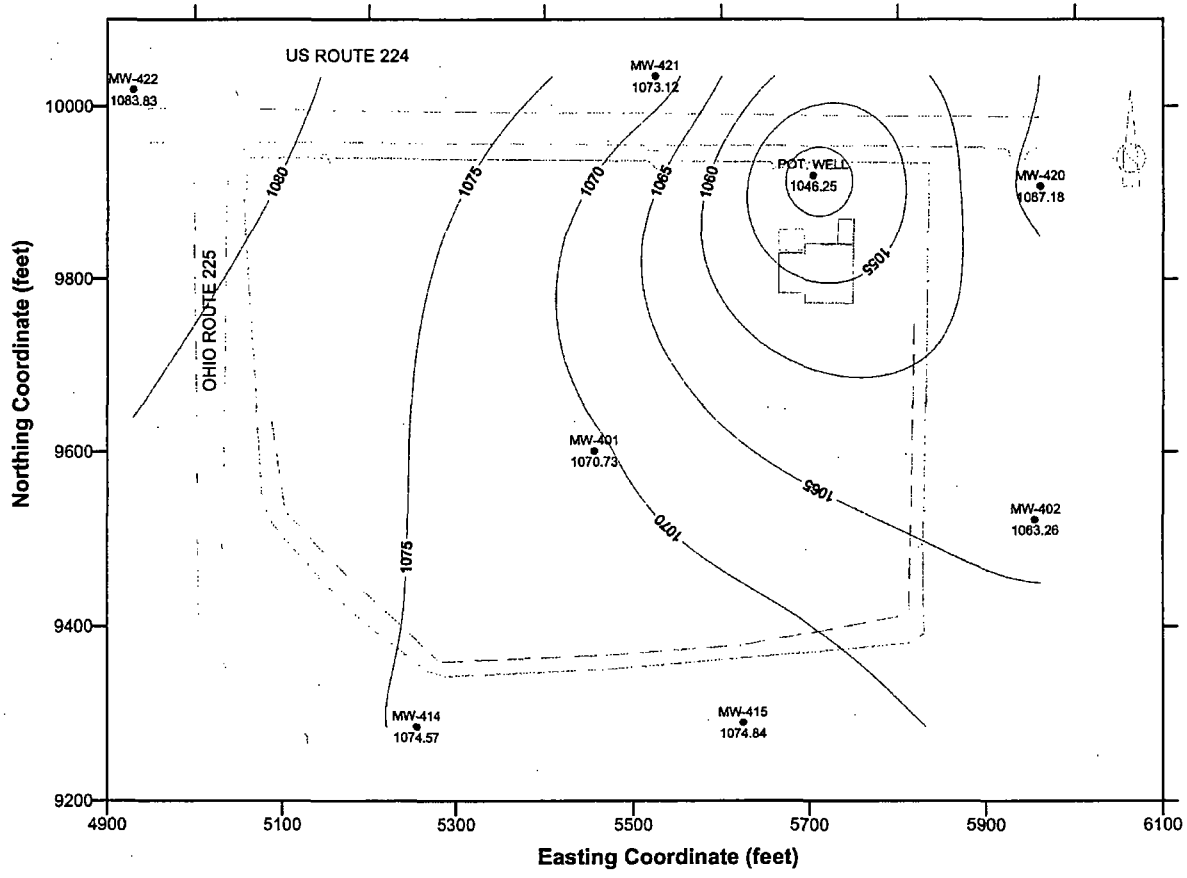


figure E.7
GROUNDWATER CONTOURS
UPPER SHARON UNIT -- APRIL 24, 2012
SUMMIT NATIONAL SUPERFUND SITE
Deerfield, Ohio

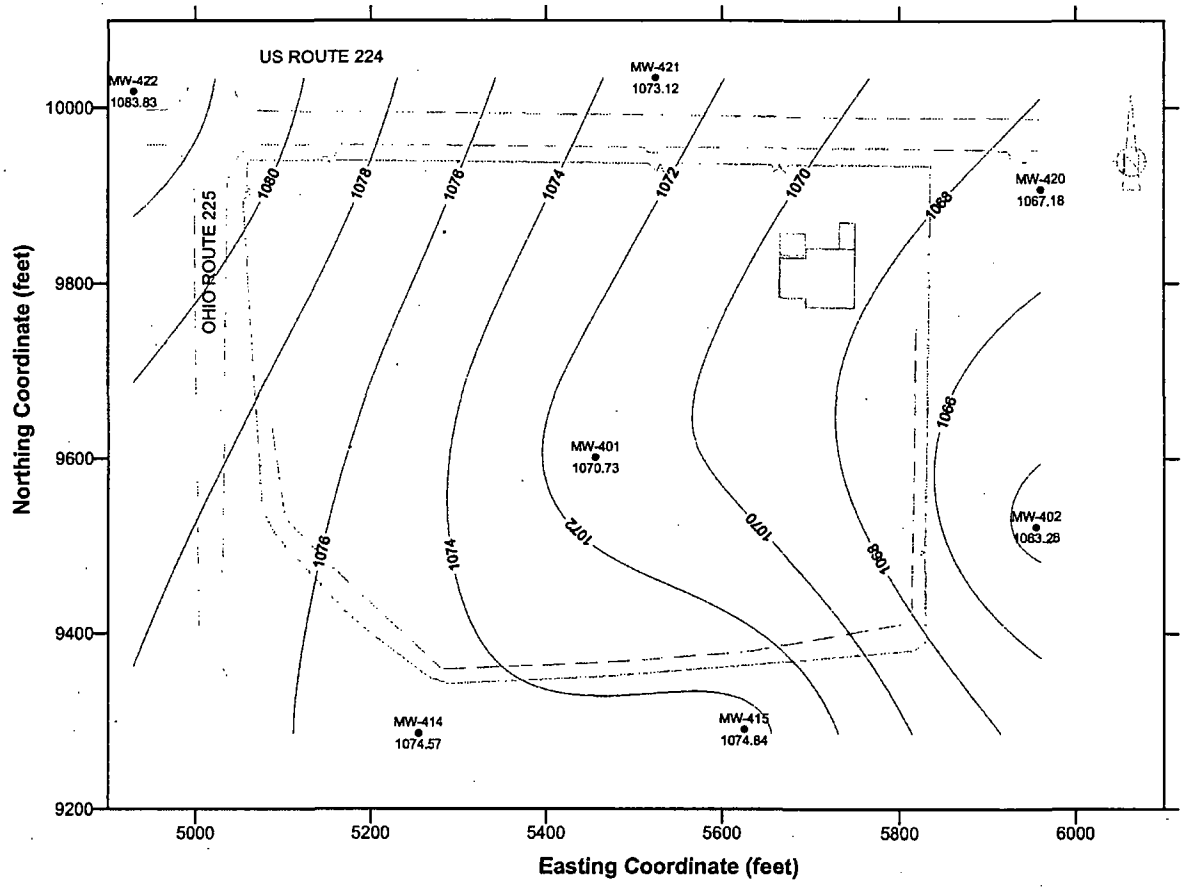


figure E.8
GROUNDWATER CONTOURS
UPPER SHARON UNIT (w/o POTABLE WELL) – APRIL 24, 2012
SUMMIT NATIONAL SUPERFUND SITE
Deerfield, Ohio

Attachment 9

Comparison of Current Performance Standards to Projected Future Standards

SUMMIT NATIONAL GROUND WATER PERFORMACE STANDARDS							
Chemical	Cas #	**ROD Performance Standards**	Current Standards*				MCLs
			Ingestion Pathway	Basis	All Pathways	Basis	
			ug/L		ug/L		ug/L
Benzene	71-43-2	**2.99E+00**	1.20E+00	Ca	**3.40E-01**	Ca	5.00E+00
Chloroethane	75-00-3	**2.94E+00**	1.50E+04	NC	**4.60E+00**	Ca	
1,2 Dichloroethane	107-06-2	**9.40E-01**	7.40E-01	Ca	**1.20E-01**	Ca	5.00E+00
Tatrachloroethylene (PCE)	127-18-4	**1.67E+00**	1.30E+00	Ca	**6.60E-01**	Ca	5.00E+00
Trichloroethylene (TCE)	79-01-6	**7.74E+00**	1.70E-01	Ca	2.80E-02	Ca	5.00E+00
Vinyl chloride	75-01-4	**4.00E-02**	2.20E-02	Ca	**2.00E-02**	Ca	2.00E+00
Note:							
Ca: Carcinogenic Risk							
NC: Noncarcinogenic Risk							
*Single chemical standard, calculated at a carcinogenic risk of 10-6 and HI of 1							
Toxicity values source: IRIS and USEPA Region 9, standard default exposure factors for a residential population used							
The TCE standard is based on a draft health assessment; the values may change							
Chloroethane has an inhalation RfC on IRIS, and an oral RfD from NCEA; clarification has been required re the SF							
Vinyl chloride in ground water is assessed based on risk to children							

Attachment 10

Table of ARARs

Table 10

COMPLIANCE WITH APPLICABLE OR RELEVENT AND APPROPRIATE
LAWS, REGULATIONS, POLICIES AND STANDARDS
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD TOWNSHIP OF PORTAGE COUNTY, OHIO

Law, Regulation, Policy or Standard	*Source of Regulation*	*Applicability or Relevance and Appropriateness as Applied to Feasibility Study Remedial Alternatives (Tables 6-1 and 6-2 of Feasibility Study)*	*Applicability or Relevance and Appropriateness as Applied to Final (100% Complete) Design*	*Final (100% Complete) Design Compliance with ARARs*
FEDERAL				
Resource Conservation and Recovery Act (RCRA)	RCRA Subtitle C, 40 CFR 260	RCRA regulates the generation, transport, storage, treatment, and disposal of hazardous waste. CERCLA specifically requires (in Section 104 (c)(3)(B)) that hazardous substances from removal actions be disposed of at facilities in compliance with Subtitle C of RCRA	40 CFR 260 establishes the regulatory framework for 40 CFR 261 through 268. Testing results (TCLP) under 40 CFR 261 will determine compliance requirements for ash and groundwater treatment sludges, if these materials are determined to be RCRA characteristic solid wastes.	Section 7.7.13 & 7 8 5 Draft O&M Plan
Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities	RCRA Section 3004, 40 CFR and 265	Regulates the construction, design, monitoring, operation, and closure of hazardous waste facilities. Subparts N and O specify technical requirements for landfills and incinerator, respectively.	Portions of 40 CFR 264 and 265, Subpart N may apply to on- Site containment of incinerator ash if the ash is determined to be a RCRA characteristic solid waste. Portions of 40 CFR 264 and 265, Subpart 0 may apply to implementation of on-Site incineration.	Section 7.7.13 Section 7.7.2
Interim RCRA/ CERCLA Guidance on Non-Contiguous Sites and Onsite Management of Waste and Treated Residue	U.S. EPA Policy Statement March 27, 1986	If a treatment or storage unit is to be constructed for onsite remedial action, there should be clear intent to dismantle, remove, or close the unit after the CERCLA action is completed. Should there be plans to accept commercial waste at the facility after the CERCLA waste has been processed, it is EPA policy that a RCRA permit be obtained before the unit is constructed.	Treatment and/or storage units constructed for on-Site remedial actions should be dismantled, removed or closed after the remedial action is completed.	Section 8.5.12 of the RC Work Plan
Standards Applicable to Transporters of Hazardous Waste	RCRA Section 3003, 40 CFR 262 and 263, 40 CFR 170 to 179	Establishes the responsibility of offsite transporters of hazardous waste in the handling, transportation, and management of the waste. Requires a manifest, recording keeping, and immediate action in the event of a discharge of hazardous waste.	Portions may apply to off-Site disposal of groundwater treatment sludges if they are determined to be RCRA characteristic hazardous wastes. Portions may apply to off-Site disposal of PCB contaminated soils if they are not treated on Site.	Draft O&M Plan Section 7.7.14

Table 10

COMPLIANCE WITH APPLICABLE OR RELEVENT AND APPROPRIATE
LAWS, REGULATIONS, POLICIES AND STANDARDS
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD TOWNSHIP OF PORTAGE COUNTY, OHIO

Law, Regulation, Policy or Standard	*Source of Regulation*	*Applicability or Relevance and Appropriateness as Applied to Feasibility Study Remedial Alternatives (Tables 6-1 and 6-2 of Feasibility Study)*	*Applicability or Relevance and Appropriateness as Applied to Final (100% Complete) Design*	*Final (100% Complete) Design Compliance with ARARs*
EPA Administered Permit Programs The Hazardous Waste Permit Program	RCRA Section 3005, 40 CFR 270, 124 40 RF 45933	Covers the basic permitting, application monitoring and reporting requirements for offsite hazards waste management facilities	Not applicable to selected remedy	
EPA Interim Policy for Planning and Implementing CERCLA Offsite Response Actions	November 5, 1985	Discusses the need to consider treatment recycling, and reuse before offsite land disposal is used. Prohibits use of a RCRA facility for offsite management of Superfund hazardous substances if it has significant RCRA violations	Portions may apply off Site disposal of PCB contaminated soils if they are not treated on Site	Section 7 7 1 1
Hazardous and Solid Waste Amendments of 1984 (1984 Amendments to RCRA)	PL 98 616, Federal Law 71 3101	Specific wastes are prohibited from land disposal under the 1984 RCRA Amendments. This includes a ban on the placement of wastes containing free liquids. Also, solvent containing wastes are prohibited from land disposal, effective November 1986. EPA is also required to set treatment levels or methods, exempting treated hazardous wastes from the land disposal ban. To date, there treatment standards have not been promulgated. The RCRA amendments will also restrict the landfilling of most RCRA listed wastes by 1991 unless treatment standards are specified		

Table 10

COMPLIANCE WITH APPLICABLE OR RELEVENT AND APPROPRIATE
LAWS, REGULATIONS, POLICIES AND STANDARDS
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD TOWNSHIP OF PORTAGE COUNTY, OHIO

Law, Regulation, Policy or Standard	*Source of Regulation*	*Applicability or Relevance and Appropriateness as Applied to Feasibility Study Remedial Alternatives (Tables 6-1 and 6-2 of Feasibility Study)*	*Applicability or Relevance and Appropriateness as Applied to Final (100% Complete) Design*	*Final (100% Complete) Design Compliance with ARARs*
National Pollutant Discharge Elimination System (NPDES) Permit	Clean Water Act Section 402, 40 CFR 122,123,125 Subchapter N	Regulates the discharge of water into public surface waters.	Portions may apply to surface discharge of treated groundwater.	Section 6.0
Toxic Pollutant Effluent Standards	40 CFR 129	Regulates the discharge of the following pollutants: aldrin/diedrin, DDT, endrin, toxaphene, benzidine, and PCBs.	Not applicable as pesticides and PCBs were not identified as contaminants in the groundwater.	
US EPA Groundwater Protection Strategy	US EPA Policy Statement August 1984	Identifies groundwater quality to be achieved during remedial actions based on the aquifer characteristics and use.	Performance standards for groundwater remediation are specified in the Design Criteria Document.	
Conservation of Wildlife Resources	Fish and Wildlife Coordination Act	This act requires agency consultation prior to modifying any body of water.	Not applicable to selected remedy	
Occupational Safety and Health Act (OSHA)	29 CFR 1910	Regulates working conditions to assure safety and health of workers.	Portions apply to all phases of remedial construction	Health and Safety Plan in RC Work Plan
Underground Injection Control Regulations	40 CFR 146	None of the alternatives include the underground injection of materials.	Not applicable to selected remedy	
Ocean Dumping Requirements	40 CFR 220-224 33 CFR 220, 224	Implementation of the alternatives does not include the dumping of any materials in the ocean	Not applicable to selected remedy	

Table 10

COMPLIANCE WITH APPLICABLE OR RELEVENT AND APPROPRIATE
LAWS, REGULATIONS, POLICIES AND STANDARDS
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD TOWNSHIP OF PORTAGE COUNTY, OHIO

Law, Regulation, Policy or Standard	*Source of Regulation*	*Applicability or Relevance and Appropriateness as Applied to Feasibility Study Remedial Alternatives (Tables 6-1 and 6-2 of Feasibility Study)*	*Applicability or Relevance and Appropriateness as Applied to Final (100% Complete) Design*	*Final (100% Complete) Design Compliance with ARARs*
Disposal of certain waste material containing TCDD (40 CFR Parts 260 to 267 Subpart J)	40 CFR Parts 260 to 267 Subpart J	The contaminated materials to be disposed of or treated in any alternative do not contain TCDD as a contaminant.	Not applicable to selected remedy	
Uranium Mill Tailing Rules		The site contains no uranium mill tailings.	Not applicable to selected remedy	
Radioactive Waste Rule High and Low Level		The site does not contain high or low level radioactive waste.	Not applicable to selected remedy	
Asbestos Disposal Rules	40 CFR 763	Asbestos was not measured at the site.	Not applicable to selected remedy	
National Register of Historic Places	Archeological and Historical Preservations Act of 1974	Implementation of the alternatives will not affect sites on the register.	Not applicable to selected remedy	
Wild and Scenic Rivers Act	40 CFR 6.302	Rivers on the national inventory will not be affected by alternatives	Not applicable to selected remedy	
Protection of Threatened or Endangered Species and their Habitats	50CFR 402	Implementation of the alternatives will not affect areas of important wildlife resources	Not applicable to selected remedy	

Table 10

COMPLIANCE WITH APPLICABLE OR RELEVENT AND APPROPRIATE
LAWS, REGULATIONS, POLICIES AND STANDARDS
SUMMIT NATIONAL SUPERFUND SITE
DEERFIELD TOWNSHIP OF PORTAGE COUNTY, OHIO

Law, Regulation, Policy or Standard	*Source of Regulation*	*Applicability or Relevance and Appropriateness as Applied to Feasibility Study Remedial Alternatives (Tables 6-1 and 6-2 of Feasibility Study)*	*Applicability or Relevance and Appropriateness as Applied to Final (100% Complete) Design*	*Final (100% Complete) Design Compliance with ARARs*
Conservation of Wildlife Resource	Fish and Wildlife Coordination Act	Implementation of the alternatives will not affect areas of important wildlife resources.	Not applicable to selected remedy	
Coastal Zone Management		Implementation of the alternatives will not affect a coastal zone.	Not applicable to selected remedy	
Toxic Substance Control Act	40 CFR 761	TSCA requirements apply to wastes containing PCB concentrations of 50 ppm or more. Site does not contain PCB at concentrations which would trigger TSCA requirements.	Portions of 40 CFR 761.6 may apply to off-Site disposal of PCB contaminated soils if they are not treated on Site. Portions of 40 CFR761.7 may apply to on-Site incineration of PCB contaminated soils if they are treated on Site.	Section 7.7.14 Section 7.7.2
Permits for Discharges of Dredged or Fill Material into Waters of the U.S.	Section 404 Permit	Implementation of alternatives does not call for discharge into U.S. Waters.	Not applicable to selected remedy	
Great Lakes Water Quality Agreement of 1978		Site not part of Great Lakes Basin ecosystem	Not applicable to selected remedy	

Attachment 11

Environmental Covenant

201312140

RECEIVED FOR RECORD
6-5 2013
AT 15:49:28
BONNIE M. HOWE
PORTAGE COUNTY RECORDER
FEE 116.00

To be recorded with Deed Records
Ohio Rev. Code § 317.08

ENVIRONMENTAL COVENANT

This Environmental Covenant is made as of the 23rd day of April, 2013, by and among Owner John Vasi, Deceased, (as further identified below) and Holder, John Vasi, Deceased, (as further identified below) pursuant to Ohio Revised Code § 5301.80 to 5301.92 for the purpose of subjecting the Site (described below) to the activity and use limitations and to the rights of access described below.

Whereas, pursuant to Section 105 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 U.S.C. § 9605, the United States Environmental Protection Agency ("EPA"), placed the Summit National Superfund Site ("Site") on the National Priorities List, set forth at 40 C.F.R. Part 300, Appendix B, by publication in the *Federal Register* on September 15, 1983; and

Whereas, in a Remedial Action/Feasibility Study (RI/FS) completed on June 30, 1988, EPA found the following contaminants had been released into the soil and sediment at the Site: methylene chloride, acetone, carbon disulfide, 1,1-dichloroethene, 1,1-dichloroethane, trans-1,2-dichloroethene, 1,2-dichloroethane, 2-butanone, 1,1,1-trichloroethane, tricholorethene, benzene, 4-methyl-2-pentanone, tetracholorethene, toluene, chlorobenzene, ethylbenzene, xylenes, phenol, 1,4-dicholorobenzene, 1,2-dichlorobenzene, isophorone, 1,2,4-tricholorobenzene, naphthalene, 2-methylnaphthalene, fluorine, hexachlorobenzene, phenanthrene, di-n-butylphthalate, butylbenzylphthalate, bis-2-ethylhexylphthalate, di-n-octylphthalate, indeno(1,2,3-c,d)pyrene, dibenz(a,h)anthracene, benzo(g,h,i)perylene, 4,4-DDT, PCBs, n-nitrosodiphenylamine, arsenic, barium, beryllium, chromium, copper, mercury, and cyanide. In the same RI/FS, EPA found the following contaminants had been released into the groundwater at the Site: methylene chloride, acetone, 1,1-dicholoroethane, 1,2-dicholorethane, 2-butanone, 1,1,1-trichloroethane, trichloroethane, 4-methyl-2-pentanone, toluene, ethylbenzene, 1,1-dichloroethene, 4-methylphenol, 2,4-dimethylphenol, 4-chloro-3-methylphenol, phenol, isophorone, naphthalene, 2-methylnaphthalene, bis-2-ethylhexylphthalate, pyrene, dimethylphthalate, di-n-octylphthalate, acenaphthalene, dibenzofuran, diethylphthalate, trans-1,2-dichloroethene, benzene, xylenes, tetrachloroethene, fluorine, hexachlorobenzene, phenanthrene, anthracene, di-n-butylphthalate, fluoranthene, butylbenzylphthalate, hexachlorocyclopentadiene, aluminum, arsenic, barium, cadmium, chromium, manganese, nickel, tin, and barium. In the same RI/FS, EPA found the following contaminants had been released into the surface water at the Site: methylene chloride, acetone, 1,1-dicholoroethane, 1,2-dicholorethane, 2-butanone, 1,1,1-trichloroethane, 4-methyl-2-pentanone, tetrachloroethene, toluene, chlorobenzene, xylenes, phenol, aniline, 1,4-dichlorobenzene, 1,2-dichlorobenzene, hexachloroethane, isophorone, benzoic acid, bis-2-ethylhexylphthalate, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, indeno(1,2,3-c,d)pyrene, dibenz(a,h)anthracene, benzo (g, h, i)perylene, arsenic barium, beryllium, cadmium, chromium, and nickel; and

Whereas, EPA issued a Record of Decision ("ROD") on June 30, 1988, and whereas EPA issued an amended ROD on November 2, 1990, which called for the expansion of Site boundaries to encompass contaminated areas along the perimeters; construction of fencing around the expanded boundary; excavation and on-Site incineration of contaminated materials; demolition of on-Site structures for on-Site disposal; collection and treatment of surface water; extraction of groundwater; relocation of a vacant residence; testing of incinerated waste material before replacement on Site; regrading and installation of a soil cover; re-routing of drainage ditches; and institutional controls to limit the future use of the property where remedial construction has occurred and to protect the performance of the remedy, and to prevent the exposure of humans or the environment to contaminants; and

Whereas on February 15, 1987, EPA issued a Unilateral Administrative Order to various potentially responsible parties, and on June 11, 1991, a Remedial Action Consent Decree ("Consent Decree") was entered which provided for the implementation of the remedial action selected in the November 2, 1990, ROD, and whereas, with the exception of the institutional controls, the remedial action has been implemented at the Site; and

Whereas, the parties hereto have agreed: 1) to grant a permanent right of access over the Site to the Access Grantees (as hereafter defined) for purposes of implementing, facilitating and monitoring the remedial action, and 2) to impose on the Site activity and Use Limitations as covenants that will run with the land for the purpose of protecting human health and the environment; and

Now therefore, Owner and EPA agree to the following:

1. Environmental Covenant. This instrument is an environmental covenant executed and delivered pursuant to Ohio Rev. Code § 5301.80 to 5301.92. EPA is the Agency, as defined by Ohio Rev. Code § 5301.80(B), that approved the environmental response project pursuant to which this environmental covenant is created. Pursuant to Ohio Rev. Code § 5301.81(B), any right of EPA under this environmental covenant is not an interest in real property.

2. Site. The one (1) parcel of real property which contains 11.5 acres located in Deerfield Township, Portage County, Ohio, which is subject to the environmental covenants set forth herein is described on **Exhibit A** attached hereto and hereby by reference incorporated herein. The Site is outlined by heavy black line on the copy of the Portage County, Ohio, Auditor's tax map (the "Map") attached hereto as **Exhibit B.**

3. Owner. John Vasi, Deceased, born March 1912 and died October 24, 1994 ("Owner"), who resided at 1012 Clearview Avenue, Akron, Ohio, is the current record owner of the Site. Owner is the Owner Settling Defendant named in the Consent Decree (described in Paragraph 10 below). Arthur R. Hollencamp was appointed receiver on April 22, 2013, in United States v. John Vasi, et al., Case No. 5:90-CV-1167 (N.D. Ohio) in order to execute this Environmental Covenant on behalf of Owner.

4. Holder. John Vasi, born in March 1912 and died on October 24, 1994, who resided at 1012 Clearview Avenue, Akron, Ohio.

5. Activity and Use Limitations on the Site.

(a) Owner agrees for himself and his successors in title not to permit the Site to be used in any manner that would interfere with or adversely affect the integrity or protectiveness of the remedial action which has been implemented pursuant to the Consent Decree unless the written consent of the EPA to such use is first obtained. Owner's agreement to restrict the use of the Site shall include, but not be limited to, not permitting any filling, grading, excavating, building, drilling, mining, farming, or other development on property on the Restricted Area unless the written consent of EPA to such use or activity is first obtained.

(b) Owner covenants for himself and his successors and assigns that there shall be no consumptive use of Site groundwater, including use, extraction, or development of said groundwater, either on or off the Site, until cleanup standards are achieved.

(c) Owner covenants for himself and his successors and assigns that there shall be no use of surface water contained within the Site for any purpose.

(d) Owner covenants for himself and his successors and assigns that there shall not be any inconsistent uses on the Site that will interfere with remedial action components or otherwise harm the integrity of the remedy components.

6. Running with the Land. This Environmental Covenant shall be binding upon the Owner and all assigns and successors in interest, including any Transferee, and shall run with the land, pursuant to Ohio Rev. Code § 5301.85, subject to amendment or termination as set forth herein. The term "Transferee," as used in this Environmental Covenant, shall mean any future owner of any interest in the Site or any portion thereof, including, but not limited to, owners of an interest in fee simple, mortgagees, easement holders, and/or lessees.

7. Requirements for Notice to EPA Following Transfer of a Specified Interest in, or Concerning Proposed Changes in the Use of, Applications for Building Permits for, or Proposals for any Work Affecting Contamination on the Site. Neither Owner nor any Holder shall transfer any interest in the Site, or make proposed changes in the use of the Site, or make applications for building permits for, or proposals for any work in the Site without first providing notice to EPA and obtaining any approvals or consents thereto that are required under the Consent Decree.

8. Access to the Site. Pursuant to Section V of the Consent Decree, Owner agrees that EPA, the Ohio EPA and the Settling Defendants, their successors and assigns, and their respective officers, employees, agents, contractors, and other invitees (collectively, "Access Grantees") shall have and hereby grant to each of them an unrestricted right of access to the Site to undertake the Permitted Uses described in Paragraph 9 below and, in connection therewith, to use all roads, drives, and paths, paved or unpaved, located on the Site or off the Site ("off-site") and rightfully used by Owner and Owner's invitees for ingress to or egress from portions of the Site (collectively, "Access Roads"). The right of access granted under this Paragraph 8 shall be

irrevocable while this Covenant remains in full force and effect. The Settling Defendants are named on **Exhibit C** attached hereto.

9. Permitted Uses. The right of access granted under Paragraph 8 of this Environmental Covenant shall provide Access Grantees with access at all reasonable times to the Site, or such other property, for the purpose of conducting any activity related to the Consent Decree or the purchase of the Site, including, but not limited to, the following activities:

a) Monitoring the Work;

b) Verifying any data or information submitted to the United States or the State;

c) Conducting investigations relating to contamination at or near the Site;

d) Obtaining samples;

e) Assessing the need for, planning, or implementing response actions at or near the Site;

f) Implementing the Work pursuant to the Consent Decree;

g) Inspecting and copying records, operating logs, contracts, or other documents maintained or generated by Owner or his agents, consistent with Section XV (Retention and Availability of Information) of the Consent Decree;

h) Assessing Settling Defendants' compliance with the Consent Decree;

i) Determining whether the Site or other property is being used in a manner that is prohibited or restricted or that may need to be prohibited or restricted by or pursuant to the Consent Decree;

j) Surveying and making soil tests of the Site, locating utility lines, and assessing the obligations which may be required of a prospective purchaser by EPA under the Consent Decree; and

k) Enforcing and Maintaining Compliance with the Environmental Covenant.

10. Administrative Record. Copies of the EPA administrative record for the Summit National Superfund Site are maintained at the following locations: **EPA Region 5, Superfund Records Center (7th Floor), 77 W. Jackson Blvd., Chicago, Illinois 60604; [Union Township Library, 7900 Cox Road, West Chester, Ohio 45069; and Union Township Hall, 9113 Cincinnati-Dayton Road, West Chester, Ohio 45069].**

11. Notice upon Conveyance. Each instrument hereafter conveying any interest in the Site or any portion of the Site shall contain a notice of the activity and use limitations, and grants of access set forth in the Environmental Covenant, and provide the recorded location of this Environmental Covenant. For instruments conveying any interest in the Site or any portion thereof, the notice shall be substantially in the form set forth in **Exhibit D**.

12. Amendments; Early Termination. This Environmental Covenant may be modified or amended or terminated while Owner owns the property only by a writing signed by Owner and EPA with the formalities required for the execution of a deed in Ohio which is recorded in the Office of the Recorder of Portage County, Ohio. Upon transfer of all or any portion of the Site, Owner waives any rights that he might otherwise have under Section 5301.90 of the Ohio Rev. Code to withhold his consent to any amendments, modifications, or termination of this Environmental Covenant, to the extent that he has transferred his interest in that portion of the Site affected by said modification, amendment, or termination. The rights of Owner's successors in interest as to a modification, amendment, or termination of this Environmental Covenant are governed by the provisions of Section 5301.90 of the Ohio Rev. Code.

13. Other Matters.

(a) Representations and Warranties of Owner. Owner represents and warrants; that Owner is the sole owner of the Site; that Owner holds fee simple title to the Site, which is free, clear, and unencumbered except for the Consent Decree; that Owner has the power and authority to make and enter into this Agreement as Owner and Holder, to grant the rights and privileges herein provided and to carry out all obligations of Owner and Holder hereunder; that this Agreement has been executed and delivered pursuant to the Consent Decree; and that this Agreement will not materially violate or contravene or constitute a material default under any other agreement, document or instrument to which Owner is a party or by which Owner may be bound or affected.

(b) Right to Enforce Agreement Against Owner; Equitable Remedies. In the event that Owner or any other person should attempt to deny the rights of access granted under Paragraph 8 or should violate the restrictions on use of the Site set forth in Paragraph 5, then, in addition to any rights which EPA may have under the Consent Decree, EPA or any Settling Defendant that is adversely affected by each denial (for example, any Settling Defendant that is prevented from conducting its remedial obligations under the Consent Decree) or by such violation shall have the right to immediately seek an appropriate equitable remedy and any court having jurisdiction is hereby granted the right to issue a temporary restraining order and/or preliminary injunction prohibiting such denial of access or use in violation of restrictions upon application by EPA or by such adversely affected Settling Defendant without notice or posting bond. Owner and each subsequent owner of the Site by accepting a deed thereto or to any part thereof waives all due process or other constitutional right to

notice and hearing before the grant of a temporary restraining order and/or preliminary injunction pursuant to this Subsection 13(b).

(c) Future Cooperation; Execution of Supplemental Instruments. Owner agrees to cooperate fully with EPA and/or the Settling Defendants and to assist them in implementing the rights granted them under this Environmental Covenant and, in furtherance thereof, agrees to execute and deliver such further documents as may be requested by EPA to supplement or confirm the rights granted hereunder.

(d) Cumulative Remedies; No Waiver. All of the rights and remedies set forth in this Environmental Covenant or otherwise available at law or in equity are cumulative and may be exercised without regard to the adequacy of, or exclusion of, any other right, remedy or option available hereunder or under the Consent Decree or at law. The failure to exercise any right granted hereunder, to take action to remedy any violation by Owner of the terms hereof, or to exercise any remedy provided herein shall not be deemed to be a waiver of any such right or remedy and no forbearance on the part of EPA and no extension of the time for performance of any obligations of Owner hereunder shall operate to release or in any manner affect EPA's rights hereunder.

(e) Severability. If any provision of this Environmental Covenant is found to be unenforceable in any respect, the validity, legality, and enforceability of the remaining provisions shall not in any way be affected or impaired.

(f) Recordation. Within thirty (30) days after the date of the final required signature upon this Environmental Covenant, Owner shall file this Environmental Covenant for recording, in the same manner as a deed to the Site, with the Portage County Recorder's Office.

(g) Effective Date. The effective date of this Environmental Covenant shall be the date upon which the fully executed Environmental Covenant has been recorded as a deed record for the Site with the Portage County Recorder.

(h) Distribution of Environmental Covenant/Other Notices. The Owner shall distribute a file-stamped and date-stamped copy of the recorded Environmental Covenant to: Ohio EPA, Portage County, each person holding a recorded interest in the Site, and the Settling Defendants.

(i) Notices – All notices, requests, demands, or other communications required or permitted under this Environmental Covenant shall be given in the manner and with the effect set forth in the Consent Decree.

(j) Governing Law. This Environmental Covenant shall be construed according to and governed by the laws of the State of Ohio and the United States of America.

(k) Captions. All paragraph captions are for convenience of reference only and shall not affect the construction of any provision of this Environmental Covenant.

(l) Time of the Essence. Time is of the essence of each and every performance obligation of Owner under this Environmental Covenant.

IN WITNESS WHEREOF, Owner and EPA have executed and delivered this Environmental Covenant as of the date first above written.

OWNER

Arthur R. Hollencamp
Hollencamp & Hollencamp, Attorneys
Receiver for John Vasi

STATE OF OHIO)
) SS.
COUNTY OF Montgomery)

The foregoing instrument was acknowledged before me this 23rd day of April, 2013, by Arthur R. Hollencamp, the receiver for John Vasi.

Notary Public

NOTARIAL SEAL STATE OF OHIO

PAULINE JO ROBERSON, Notary Public
In and for the State of Ohio
My Commission Expires Sept. 1, 2013

IN WITNESS WHEREOF, Owner and EPA have executed and delivered this Environmental Covenant as of the date first above written.

UNITED STATES OF AMERICA
On behalf of the Administrator of the
United States Environmental Protection Agency

By: _____
Richard C. Karl, Director,
Superfund Division, Region 5

STATE OF ILLINOIS)
) SS.
COUNTY OF COOK)

The foregoing instrument was acknowledged before me this 30th day of APRIL, 2013, by Richard C. Karl, Director, Superfund Division, Region 5 of the United States Environmental Protection Agency, on behalf of the United States of America.

_____
Notary Public

BERTANNA M. LOUIE
OFFICIAL SEAL
Notary Public, State of Illinois
My Commission Expires
March 15, 2014

Prepared By:

Steven J. Paffilas
Assistant U.S. Attorney
400 United States Court House
801 W. Superior Avenue
Cleveland, OH 44113-1852

EXHIBIT A

Legal Description of the Site

Known as being part of Lot #56 in Deerfield Township and bounded and described as follows: Beginning at the northwest corner of Lot X56; thence S. 89 deg. 25' East along the north line of said lot #56, a distance of 811.85 feet, and along the center line of U.S. 224; thence south 0 deq. 52" West 60Q feet to an iron pipe and passing over an iron pipe set at 30 feet at the side of the highway; thence N. 89 deg. 25'West 811.85 feet to the west line of Lot #56, and the center line of S.R. 225, and passing over an iron pipe set at 30 feet at the side of highway; thence N 52' East along the west line of said Lot 56, 600 feet to the place of beginning and containing 21.18 acres of Land, more or less.

EXHIBIT B

Portage County, Ohio, Auditor's Tax Map of the Site

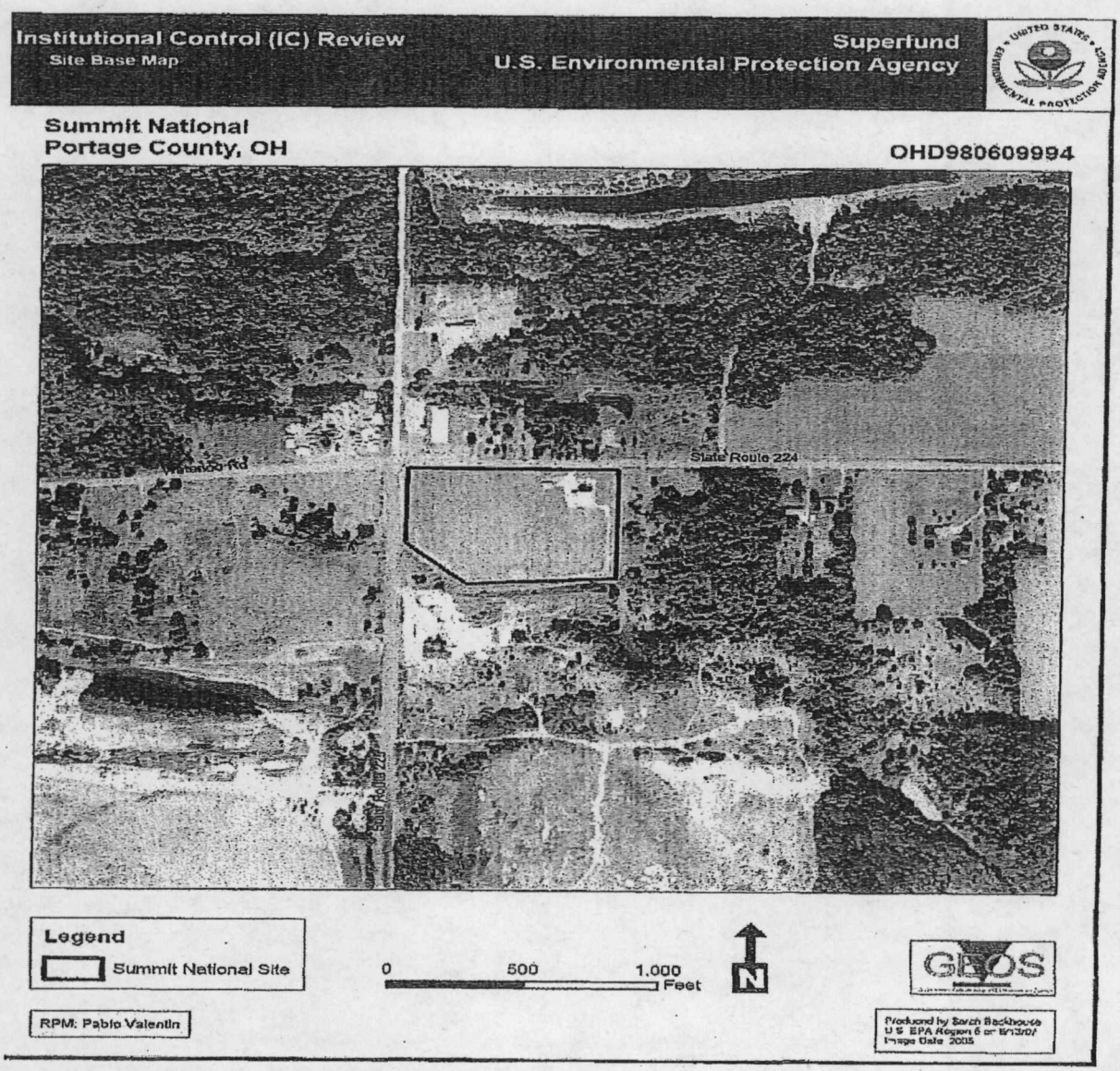


EXHIBIT C

List of Settling Defendants

1. Airco, Inc., now known as the BOC Group. Inc.
2. American Cyanamid Company
3. Bechtel-McLaughlin, Inc.
4. Browning-Ferris Industries of Ohio, Inc.
5. Browning-Ferris Industries of Pennsylvania, Inc.
6. Canton Drop Forge, Inc., a subsidiary of Cordier Group, parent company, Cordier Holdings
7. Columbia Gas Transmission Corporation
8. Container Corporation of America
9. E.I. DuPont de Nemours & Company
10. Erieway Inc., formerly known as Erieway Pollution Control, Inc.
11. Bridgestone/Firestone, Inc., formerly known as The Firestone Tire & Rubber Company
12. Ford Motor Company
13. General Motors Corporation
14. Gencorp, Inc., formerly known as General Tire and Rubber Company and/or Diversitech General
15. Divested Aerospace Corporation, successor in interest to Goodyear Aerospace Corporation and subsidiary of Loral Corporation
16. Goodyear Tire and Rubber Company
17 Gould, Inc., now owned by Nippon Mining U.S., Inc.
18. Occidental Chemical Corporation, formerly known as Hooker Chemicals and Plastics Corporation
19. Safety Kleen Envirosystems Company, formerly known as McKesson Envirosystems Company, formerly known as Inland Chemical Corporaton
20. Mobil Oil Corporation
21. Morgan Adhesives Company

EXHIBIT D

Notice Upon Conveyance of Site or any Portion Thereof

THE INTEREST CONVEYED HEREBY IS SUBJECT TO A CONSENT DECREE DATED JUNE 11, 1991, WHICH WAS RECORDED IN THE OFFICE OF THE PORTAGE COUNTY RECORDER, **OR BOOK _____, Pages _____**, AND WHICH RESTRICTS THE INTEREST CONVEYED AS SET FORTH IN THIS NOTICE AND AN ENVIRONMENTAL COVENANT, DATED _____, 2013, RECORDED IN THE DEED OR OFFICIAL RECORDS OF THE PORTAGE COUNTY RECORDER ON _____, 2013, in BOOK _____, Pages _____, THE ENVIRONMENTAL COVENANT CONTAINS THE FOLLOWING ACTIVITY AND USE LIMITATIONS AND ACCESS RIGHTS:

Activity and Use Limitations on the Site.

(a) The Site shall not be used in any manner that would interfere with or adversely affect the integrity or protectiveness of the remedial action which has been implemented or which will be implemented pursuant to the Consent Decree unless the written consent of the EPA to such use is first obtained.

(b) There shall be no consumptive use of Site groundwater, including use, extraction, or development of said groundwater, either on or off the Site, until cleanup standards are achieved.

(c) There shall be no use of surface water contained within the Site for any purpose.

(d) There shall not be any inconsistent uses on the Site that will interfere with other remedial action components or otherwise harm the integrity of the remedy components

Access to the Site. Pursuant to Sections V and X of the Consent Decree and the Environmental Covenant, EPA and the Settling Defendants, their successors and assigns, and their respective officers, employees, agents, contractors, and other invitees (collectively, "Access Grantees") shall have an unrestricted right of access to the Site to undertake the Permitted Uses described below and, in connection therewith, to use all roads, drives, and paths, paved or unpaved, located on the Site or off-site. The right of access set forth above shall be irrevocable while the Environmental Covenant remains in full force and effect. The Settling Defendants are named in **Exhibit C** of the Environmental Covenant.

Permitted Uses. The right of access granted under the Environmental Covenant shall provide Access Grantees with access at all reasonable times to the Site, or such other property, for the purpose of conducting any activity related to the Consent Decree or the purchase of the Site, including, but not limited to, the following activities:

a) Monitoring the Work;

b) Verifying any data or information submitted to the United States or the State;

c) Conducting investigations relating to contamination at or near the Site;

d) Obtaining samples;

e) Assessing the need for, planning, or implementing response actions at or near the Site;

f) Implementing the Work pursuant to the Consent Decree;

g) Inspecting and copying records, operating logs, contracts, or other documents maintained or generated by Owner or his agents, consistent with Section XV (Retention and Availability of Information) of the Consent Decree;

h) Assessing Settling Defendants' compliance with the Consent Decree;

i) Determining whether the Site or other property is being used in a manner that is prohibited or restricted, or that may need to be prohibited or restricted, by or pursuant to the Consent Decree;

j) Surveying and making soil tests of the Site, locating utility lines, and assessing the obligations which may be required of a prospective purchaser by EPA under the Consent Decree; and

k) Enforcing and maintaining compliance with the Environmental Covenant.